he Itliming Immal,

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1677.—Vol. XXXVII.

LONDON, SATURDAY, OCTOBER 12, 1867.

(SUPPLEMENT) {STAMPEDSIXPENCE UNSTAMPED..FIVEPENCE

R. JAMES CROFTS, STOCK AND SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(Established 24 years.)

Holders of mining shares difficult of sale in the open market may find purchasers for the same through Mr. CROFTS' agency. Also parties requiring advice how to act in the disposal or abandonment of doubtful mining stocks may profitably avail of Mr. CROFTS' long experience on the market in all cases of doubt or difficulty, legal or otherwise.

The standard for copper ore having advanced this week is a favourable restion, and being indicative of further advances is important for shares in copper mines, of which advantage should be taken by capitalists to invest at low prices without delay. Mr. CROFTS furnishes a select list of current shares, either for investment or speculation.

There are also symptoms of a general improvement in the tone of the Mining Market this week, and a stronger impetus may be given to prices much sooner than is generally anticipated.

Bankers: National Bank of Scotland, Finch-lane.

MR. JOHN BUMPUS (Successor to WILLIAM LANE),
44, THREADNEEDLE STREET, has FOR SALE:—
30 Caldbeck Fells, 13s. 100 Frontino, 13s. 50 No. Treskerby, 32s 6d
50 Chontales, 44 17s. 6d. 35 Ge. So. Tolgus, 14s 3d
10 Clifford, 47\(\frac{1}{2}\), 6d. 35 Ge. No. Daws, 44\(\frac{1}{2}\), 50 Frontidence, 429\(\frac{1}{2}\), 6d
10 Cliverton, 469\(\frac{1}{2}\), 20 Ge. No. Daws, 44\(\frac{1}{2}\), 55 Ge. No. Laxey, 18s\(\frac{1}{2}\), 55 South Darren, 27s\(\frac{1}{2}\), 6d
52 E. Carn Brea, 42 113
10 East Lovell, 48\(\frac{1}{2}\), 25 North Drown, 42\(\frac{1}{2}\), 6d
55 Ge. Wegterrandon, 48\(\frac{1}{2}\), 6d
55 Ge. Wegterrandon, 48\(\frac{1}{2}\), 6d
55 Ge. Wegterrandon, 48\(\frac{1}{2}\), 6d
55 West Caradon, 48\(\frac{1}{2}\), 6d
55 Wh. Grenville, 32s 6d

GUIDE TO INVESTORS.—MR. LELEAN'S STOCK, SHARE, AND FINANCE REGISTER for October, contains a comprehensive eview of the Stock and Share Markets; a list of all the dividends paid in August and September; a selection of investments paying 10 to 16 per cent; and such aformation as is necessary to guide intending investors. 6d. per copy, or 5s. annually, post free. Published by Mr. BAKER LELEAN, at his offices, 11, Royal Exchange, Loudon

W I L L I A M W A R D,
STOCK AND SHAREDBALER.
No. 29, THREADNEEDLE STREET, LONDON, E.C.

MR. JOHN BATTERS, STOCK AND MINING SHAREBROKER, 18, THROGMORTON STREET, LONDON, E.C.

Mr. WILLIAM SEWARD, STOCK AND SHAREDEALER, 19, THROGMORTON STREET, LONDON, E.C.

M E S S R S. WARD AND JACK MAN,
STOCK AND SHAREDEALERS,
CUSHION COURT, OLD BROAD STREET, CITY, E.C.
Every description of marketable SHARES BOUGHT or SOLD, either for immediate settlement or account, at the closest dealing prices.
Bankers: London and Westminster, Lotbbury.

MR. THOMAS THOMPSON, MINING OFFICEA

MESSRS. WILSON, WARD, AND CO.,
SHAREDEALERS.

14, UNION COURT, OLD BROAD STREET, LONDON, E.C.
BUYERS of any number of Frontino and Bolivia, and New Great Consels,
shares at full market price. A special report upon New Great Consols Mine can
be had on application, post free.

MR G. D. SANDY, STOCK AND SHAREDEALER, No. 48, THREADNEEDLE STREET, LONDON, E.C., TRANSACTS BUSINESS IN EVERY DESCRIPTION OF STOCK EXCHANGE SECURITIES, MINING and FINANCIAL ENTERPRISES, at close market prices.

TAMAR VALLEY SILVER-LEAD.—The report from this mine is of a most satisfactory character. G. D. Sandy is in possession of private and reliable information, which justifies him in fearlessly recommending the shares.

Correct Daily Price List may be had on application.

Money advanced to any amount on legitimate stocks and shares.

JOHN RISLEY, STOCK AND SHAREBROKER (SWORN BROKER): 48. THREADNEEDLE STREET, LONDON, E.C. Bankers: London and Westminster, Lothbury.

GEORGE RICE, STOCK AND SHAREDEALER, 78, OLD
BROAD STREET, LONDON, E.C. (Member of the Mining Exchange),
(25 years' experience), TRANSACTS BUSINESS in MINING SHARES, at
close prices OFFERS WANTED for—
40 Bryn Gwlog.
75 Sithney Metal.
10 West Stray Park.
40 West Caradon.
20 Great Fortune.
20 West Caradon.
20 West Caradon.
Money advanced on mining shares.
Bankers: Bank of England.

MR. EDWARD BREWIS, PALMERSTON BUILDINGS, 34, OLD BROAD STREET, LONDON, E.C., has BUSINESS at pet prices in all SHARES dealt in on the market.

Bankers: National Bank, London, E.C.

M. R. T. ROSEWARNE, 81, OLD BROAD STREET,
LONDON, has BUSINESS in the following shares for cash or time on "Clifford. Frontino. Frontino. "Prince of Wales.
Great North Downs. South Grenville.
Beast Russell. "Great Retallack. Marke Valley. "North Treskerby.
"East Russell. "And the Valley. "North Treskerby. Wheal Scion. West Seton. Wheal Agar.
"Seast Russell. "North Crofty."

*Basic Carn Brea. *North Crofty.

PRINCE OF WALES.—From my report this morning I find that they are still driving north on the cross-course in the 55, where the lode is worth 12l. per fathom, and likely to improve—a splendid looking thing. The 55 east is worth 14l. per fm. The cross-cout north towards the north lode is progressing favourable, between the country of water. The law will be clear of stuff next week, when full operations will be commenced. The will be clear of stuff next week, when full operations will be commenced. The will be clear of stuff next week, when full operations will be commenced. The will be clear of stuff next week, when full operations will be commenced. The will be clear of stuff next week, when full operations will be commenced. The stuff of the

Office hours from 10 to 4) Money advanced on good mining shares.

Bankers: Bank of England.

Bankers: Bank of England.

M. R. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C. (Established 13 years), has 46 to 50 to 5

MR. O. 4. ROYAL EXCHANGE BULGINGS, LONDON, E.C. (Established 19; rears). has FOR SALE as nett prices:—50 Don Pedro, £2½ prem.; 70 Frontino and Bolivia, 12s.; 100 Rossa Grande, 10s.; 200 Anglo-Brazilian; 30 South Condurrow, 13s. 6d.; 15 Rose and Chiverton United; 100 West Tremayne, 7s.; 160 Redmoor, 8s.; 110 West St. Ives: 50 Crebor, 6s.; 25 East Rosewarne, 7s. 6d.; 15 Colenton United; 100 West Trances, £10: 50 Okel Tor; 50 West Wheal Kitty, 10s.; 25 North Crofty, £3 Pos.; 10 Wheal Uny, 22s.; 35 Wheal Transack; 30 East Lawer; 30 East Bottle Hill; 1 Devon Great Consols; 2 Minera, 197%; 50 South Darren, 25s.; 30 West Drake Walls, 5s.; 50 Gawton; 20 Great Sent Chiverton, 11s. 6d. the purchase of Minera, Mass-y-safn, South Caradon, 24wtos, 43d Rose and Rose and Chiverton. UDGE recommends the purchase of Minera, Maes-y-safn, South Caradon, , and Rose and Chiverton.

STOCK EXCHANGE SECURITIES.—THE LONDON DAILY RECORD, STOCK AND SHARE LIST (entered at Stationers' Hall). Annual subscription, £1 is.; by post, £2 5s.; monthly subscription, by post, 4s.; single copy, id.—by post, 2d. Published by PETER WATSON, Stock and Sharedealer, 79. Old Broad-street, London, E.C.

This Stock and Share List is published every evening at 5 o'clock, and contains the latest prices of railways, banks, colonial government securities, Cornish and Devon mines, gold mines, insurance, foreign railways, and miscellaneous shares; comments made on the daily operations in stocks and shares, showing the rise and fall in prices. Forwarded by same night's post to subscribers (to regular customers free). Shareholders or investors about to operate in stocks or shares can be furnished with the list on application.

N.B.—The present is a most favourable opportunity for the investment of capital in several foreign stocks, railways, mines, banks, &c., which, on the present market price, are paying in interest or dividends at the rate of tools per cent. per annum.

THE LONDON DAILY RECORD—STOCK AND SHARE LIST—STOCK EXCHANGE SECURITIES. Published every evening at 50 clock. It contains the latest prices of railways, banks, mines, foreign stocks and bonds, financial, insurance, and miscellaneous shares, remarks on the daily rise and fall in prices, with advice as to purchase and sales. Annual subscription, £1 1s.; by post, £2 5s.; monthly subscription—by post, 4s.; single copy, id.; by post, £2.

PETER WATSON, Stock and Sharedealer, 79, Old Broad-street, London

INVESTMENT OR SPECULATION.—A SELECTED LIST OF RAILWAYS, BANKS, MINES, COLONIAL SECURITIES, FOREIGN GOVERNMENT BONDS, &c., forwarded to bona fide inventors on application, in addition to the high rate of interest many of the above are paying, there is now every probability of a great rise in market value.

PETER WATSON, STOCK AND SHAREDEALER,
79, OLD BROAD STREET, LONDON
(three doors only from Hercules-passage, entrance to the Stock Exchange). Twenty-three years' experience.
(Two in Cornwall and Twenty-one in London.)

Bankers: The Alliance Bank, and the Union Bank of London References given and required (when necessary) in all the principal towns the United Kingdom.

PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES," of Friday, Oct. 11, No. 445, Vol. IX., price 6d. each copy, forwarded on application, contains information on the following mines:

North Wheal Chiverton. Prosper United. West Chiverton. Great South Tolgus. West Wheal Kitty. West Wheal Kitty. West Wheal Kitty. West Wheal Kitty. Great Wheal Lovell. North Treskerby. The Chontaies Gold. Postarcha. With a Leading Article on Mining and its Prospects; Remarks on the Future Prospects of Mining in the Marazlon district; Advance in the Copper Standard, &c., &c.

EC., &C. PETER WATSON, Stock and Sharedealer, 79, Old Broad-street, London, E.C.

M. R. EDWARD COOKE, STOCK AND SHAREDEALER,
76, OLD BROAD STREET, LONDON, E.C.
EDWARD COOKE has visited the mining district of Cornwall during the present week, and will feel much pleasure in affording information on the mines in the Chiverton, Great Wheal Vor, and Helston districts, which latter includes East Wheal Loveli, Trumpet Consols, and other mines.
Orders for all kinds of Stock Exchange securities, either by letter or telegraph, promptly attended to.
N.B.—A Dally Price List on application.
Satisfactory references given in any town in the United Kingdom.
Bankers: Alliance Bank.

. W . H . C U E (late of the firm of WATSON and CUELL),
S T O C K A N D S H A R E D E A L E R I, FINCH LANE, CORNHILL.
References exchanged.
All transactions can be for cash or account.
Bankers: Bank of England. UE

Bankers: Bank of England.

M. R. JOHN R. PIKE, STOCK AND GENERAL
SHAREDEALER, has FOR SALE SHARES in the following mines:—
20 Grenville, £1 11s. 20 Chiv. Moor, £5 10s. 5 Grambler, £3.
25 East Grenville, £2 3 9 50 Dale, 3s. 3d. 90 No Treskerby, £1 12 6
16 E. Carn Brea, £2 10s. 2 East Bassel, £15. 50 So. Condurrow, 16s 9d
10 Marke Valley, £6 3 9 20 E. Bussell, £1 7s.
For immediate purchase, Mr. Pike advises Tamar Valley Silver-lead Mine shares, which cannot fall to handsomely remunerate the investor. Shares can now be had at a few shillings, which in a few months are expected to be worth as many pounds.

M. B. JAMES HUME, 74, OLD BROAD STREET,
MEMBER OF THE MINING EXCHANGE, LONDON.
TRANSACTS BUSINESS in all description of railway stocks, mine shares, and miscellaneous securities, at nett prices, and at margins of 1½ per cent. on mine shares, and 3½ per cent. on railways.
Mr. HUME having returned from Cornwall is enabled to give valuable information respecting several mines likely to have a great rise in value, and will forward a selected list of shares on application.

Bankers: The London Joint-Stock Bank.

BARTLETT AND CHAPMAN, STOCK AND
SHAREDEALERS, 2, BUCKLERSBURY, LONDON, E.C.
BARTLETT and CHAPMAN'S "Investment Circular and Financial Record"
for this month is now ready, and should be consulted by all who wish to make
safe and profitable investments.

Bankers: London and Westminster Bank. WALTER TREGELLAS, 122, BISHOPSGATE STREET WITHIN, E.C., DEALS in ALL DIVIDEND and sound PROGRESSIVE MINE SHARES, either for cash or the fortnightly settlement at close

AND STATEMENT OF CASE OF THE PROPERTY OF THE STATEMENT OF

M R. J A M E S S T O C K E R,
PALMERSTON BUILDINGS, OLD BROAD STREET, and MINING
EXCHANGE, LONDON, E.C., STOCK AND SHAREDEALER.
Mines, British and Foreign Colonial Securities, Railway, Bank, Miscellaneous, and every description of shares BOUGHT and SOLD at the closest Mines, British description or share acoust, and every description or share acoust, dealing prices for cash or account, Bankers: London and Westminster.

MATTHEW GREENE, STOCK AND SHAREDEALER,
ST. MICHAEL'S HOUSE, CORNHILL, LONDON, E.C.
MATTHEW GREENE recommends for immediate purchase Tamar Valley SilverLead shares, now selling for a few shillings per share, and certain for a rise to
as many pounds in a few fathoms sinking. Parties desirous of investing in this
most promising lead mine should apply at once. Plans, specimens of the lode,
and every particular can be had at M. G.'s office.
M. G. confidently asserts that no such chance is at present to be had as the
shares in this mine.

M. G. confidently asserts that no such change is a property shares in this mine.

Mr. Greene is most desirous that all parties meditating taking shares should first either see for themselves, or send a competent mining agent, to whom on application M. G. will be happy to give an order to inspect the property.

The agent of this mine writes that a more healthy and promising lode for producing large quantities of rich ore cannot be seen.

INVESTMENT, LOAN, AND BANK AGENCY.

Established 1839.

Investments and Sales of every description of Public Securities can be effected, either for immediate or deferred settlement, as may be agreed upon.

Loans granted, for one year or any shorter period, on Stocks and Shares having a market value.

a marget value.

DEPOSITS of all amounts received at 5 per cent.

Bank and Money Agency Business generally undertaken.

RICHARD TAYLOR AND COMPANY.

No. 12, Clement's-lane, Lombard-street, London, E.C.

MINING FIELDS of THE WEST: a PRACTICAL EXPOSITION of the PRINCIPAL MINES and MINING DISTRICTS of CORNWALL and DEVON.

Published by CHARLES THOMAS, at 3, Great St. Helen's, London, E.C. One Shilling. Post-free, fourteen stamps.

M R. C H A R L E S T H O M A S, MINING AGENT, GENERAL SHAREDEALER, AND AUCTIONEER, 3, GREAT ST. HELEN'S, LONDON, E.C. In the Press,

One Shilling. Post-free, fourteen stamps.

MESSRS. LANE AND GIBBS, 2, ROYAL EXCHANGE,
LONDON, E.C. (Members of the Mining Exchange), STOCK AND
SHAREDEALERS, transact business in all kinde of securities at closest nett
prices for cash or account.

Bankers: London and County Bank.

MARKE VALLEY, AND EAST CARADON MINES—We have persistently, for the
past eighteen months, recommended our correspondents to continue their holdings, and, in the event of not being shareholders, to invest in these mines. The
prosent prices of shares, and the dividends paid during that time, are sufficient
proof of the genulineness of our counsel. We do still, and most consistently with
the best of advice, continue to urge a further investment in both. None have
paid greater attention than ourselves to the merits of the iocality in which
these mines are situated—viz., the Caradon mining district; and we venture an
opinion that, whilst some of the western districts of Cornwall will become abandoned, this will not only, as at present, be the star of the East, but the star of
the county. Our reasons for recommending these two mines in particular,
amongst the many good and profitable ones about Caradon Hill, are too lengthy
for an advertisement, but applications to us, accompanied with a fee of £1 is.
(which will be returned in the event of business), will be attended to.

BUYERS of West Rose Down, North Phœnix, Marke Valley, and East Caradon, at fair market prices.

A F E I N V E S T M E N T S,
paying 5 to 20 per cent, per annum on outlay.
SHAREHOLDERS, CAPITALISTS, AND INVESTORS
uiring valuable and reliable information, and seeking safe, sound, and
profitable investments, should at all times consult

SHARP'S INVESTMENT CIRCULAR 73

Post free. It is a safe guide for executors, trustees, and others.

GRANVILLE SHARP, STOCK AND SHAREDEALER,
32, POULTRY, LONDON, E.C. Established 1852.

MR. J. B. REYNOLDS, STOCK AND SHAREDEALER,
70 and 71, BISHOPSCATE STREET WITHIN, LONDON, E.C.
Mr. REYNOLDS has SPECIAL BUSINESS in the undermentioned mines:—
Gothle.
West Wheal Kitty.
Great Valeallack.
Great Laxey.
Great Wheal Vor.
Cuddra.

Established Ten Years. Member of the Mining Exchange.
Bankers: City Bank.

M R. HENRY MAND SHAREDEALER,
No. 44, THREADNEEDLE STREET, LONDON, E.C.
Mr. HENRY MANSELL, having had twelve years' experience in the Mining Market, now begs to offer his services in the purchase and sale of Stock and Mining Shares. References exchanged.
References exchanged.
Bankers: London Joint-Stock Bank.

MESSRS. POWELL AND MOSS, STOCK AND SHAREDEALERS, 78, OLD BROAD STREET, LONDON, E.C., and Mining Exchange, London, E.C. Messrs. Powell and Moss have large dealings in the principal Market Mines. They are also prepared with a selected list of shares for investment or speculation.

SPECIAL BUSINESS as BUYERS or SELLERS of shares in the Gold Mines.

Bankers: Bank of England.

EMERSON, 28, GREAT WINCHESTER STREET, M LONDON, E.C., has the following SHARES FOR SALE:—100 Dale, 2s. 6d.; 5 Rose and Chiverton, 25 West St. Ives; 50 Lady Bertha, 1s. 6d.; 56 Budnick Consols, 50 Gwydyr Park, 2s. 6d.

Advice given on the sale and purchase of shares.

Eighteen years experience in Cornwall and Thirteen in London.

CHONTALES GOLD COMPANY.—FULL PARTICULARS of the DIFFERENT CLASSES of SHARES can be obtained on application to Mr. J. H. MURCHISON, No. 8, Austinfriare, E.C.

MR. J. N. MAUGHAN, STOCK AND SHAREBROKER (Member of the Stock Exchange),
No. 2, COLLINGWOOD STREET, NEWCASTLE-ON-TYNE,
Transacts business in Railways, Funds, and every description of Mines,
Bankers,—Messrs. Lambton and Co.

MR. E. J. BARTLETT, of 30, GREAT ST. HELEN'S, E.C., can RECOMMEND INVESTMENTS that will WELL REPAY for CAPITAL EMPLOYED. A Selected List on Application.

SPECIAL BUSINESS in North Crofty, West Godolphin, Prince of Wales, and Great Laxey. Will shortly be published, a carefully compiled work as a Guide to Investors.

MR. THOMAS SPARGO, STOCK AND SHARE DEALER, 224 & 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C. 4

JAMES SCOTT AND CO., STOCK AND SHAREDEALERS,
1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.
Mine Shares and all Stock Exchange securities desit in at close market prices
for cash or the bi-monthly settlement. References given.
JAMES SCOTT and Co. are the proprietors of the "British and Foreign Mining
Circular," published immediately after the Stock Exchange fortnightly settlements.

M ESSRS. KEANE AND CO MINING AGENTS, AND SHAREDEALERS. 90, CANNON STREET, LONDON, E.C., and BRIDGEWATER CHAMBERS, BROWN STREET, MANCHESTER.

MESSRS, J. TAYLOR AND CO., FINANCIAL, MINING, AND GENFRAL AGENTS, 17, CROSS STREET, MANCHESTER,

have the following SHARES FOR SALE:—
80 New Birch Tor and 30 Cashwell. 5 West Caradon.
Vitifer. 20 Great Mona.

J. TAYLOB and Co. have still a few of the second issue of Great Mona shares on offer, the immediate purchase of which they strongly recommend.

M ASSAYER AND ANALYTICAL CHEMIST, Y, SWANSEA.

T H O M A S T H O M
ASSAYER, &c., SWANSEA. T H O M A 8, M R.

AS S A Y O F F I C E A N D LABORATORY,
No. 2, CROWN CHAMBERS, CROWN COURT,
THREADNEEDLE STREET.
CONDUCTED BY W. T. RICKARD, F.C.S., &c.
(Late MITURELL and RICKARD).
Assays and analyses of every description of mineral and other substances,
manures, &c.
Gentlemen going abroad for mining purposes instructed in assaying, and the
most improved methods of reducing gold, silver, and other motals.
MINING PROPERTIES INSPECTED AND REPORTED ON.

FOR SALE.—SIXTY SHARES WEST MARIA AND FORTESCUE MINE, at 10s. each.
Apply to Messrs. W. and D. MacLean, 89, West George-street, Glasgow.

FOR SALE, BY PRIVATE CONTRACT:

80 Pembroke Slate shares, 50 East Bottle Hill, 30 East Rosewarne, 10 Rose
warne United, 40 West Wheal Kitty.
Address, "T.," MINING JOURNAL Office, 26, Floot-street, London.

Original Connespondence.

NOTES ON FORESTS AND WATER SUPPLY.

SIR,—Considering the very great advantages which a good supply of water-power and of timber offers to mining, as well as everyother branch of industry, I trust the following remarks will not have been made in vain, especially if they should tend to draw attention to the great benefits derivable from the replanting of forests in places where the improvidence of man has destroyed them, and from their preservation by judiciously regulating the cutting of the timber necessary for industrial nurroses, and by preserving the young traces where they

the improvidence of man has destroyed them, and from their preservation by judiciously regulating the cutting of the timber necessary for industrial purposes, and by preserving the young trees, where they may still happen to exist.

In order to independently be able to support a large population a country must be fertile, but the very best of soils cannot be fertile without a sufficiency of stimulating moisture; hence the fertility and the thereupon dependent prosperity of a country rest mainly upon its supply of water as furnished by aerial and terrestrial sources. Numerous instances serve to prove that the guardians and preservers of atmospheric moisture, and of the springs, rivulets, rivers, and lakes of a country are its forests; and even where snow-topped mountains guarantee an independent, lasting supply of water, forests are indispensable to man, for there they guard the valleys against the ravages of snow-slips (avalanches). In the South American virgin forests occur occasional tracts where, owing to the nature of the ground, no spring is met with for leagues around; but there kind Providence, by means of the forest, has furnished us with vegetable springs. The Sipos de Aqua, or water-creepers, any one of which, on being cautiously cut at both ends, yields a most delicious, cool pure water: on more than one occasion, after we had refreshed ourselves with a delectable draught of that water, I reconnected again the two ends with their parent stem, bandaging the joints in the best way I could, with the hope that the parts would heal together again for the benefit of future passers by; and it is to be wished others will also do the same, for, after all, these water-creepers are not of very frequent occurrence. It is almost as yet impossible to calculate the immense quantity of water which is constantly being raised from the surface of the earth in the shape of invisible and visible vapour by the action of solar heat and of dry air. Wherever now such surface is covered with forests there the trees, &c., with earth thus protected; and as the earth would thus be allowed to retain its original degree of moisture, it would not, by capillary attraction, absorb any of the water of springs, lakes, rivulets, and rivers situated near, or within, or traversing it. On the other hand, where the surface of the earth is not protected by forests, that surface will be directly and instantaneously affected by solar heat and dry air; and the moisture-abstracting influence of these agencies will be at once perceptible even to a certain depth below surface. Whatever now be the wincerel economician of the ground he it can be allowed. and the moisture-abstracting influence of these agencies will be at once perceptible even to a certain depth below surface. Whatever now be the mineral composition of that ground, be it sand, clay, or any other compound, it will become excessively dry and parched, and having—as almost every kind of ground has—a natural tendency to recompense itself for the degree of moisture it lost, and is losing, it is sure to absorb part, if not the whole, of the water of any lake, river, rivulet, and spring which happens to be within its reach; almost in the same way as a piece of blotting-paper whose one end is dipped into a vessel with water, while its other end is exposed to the evaporation of the analysis have one for the vertex to get due but in world.

into a vessel with water, while its other end is exposed to the evaporising action of the sun's heat or of currents of dry, hot air, would suck up, and bring to the dry end, the water contained in the vessel. I shall now cursorily mention a few illustrative facts. While the "mountains" of slags which we meet with in many parts of Spain testify to the intense activity and energy of the ancient Phenician and Roman miners,* the immense quantity of those slags affords at the same time silent, but strong, evidence of the recklessness of those miners in wantonly destroying the forests of that country, thus incipiating the subsequent sterility of many extensive tracts of once fertile land. Spain about the period of its Roman occupation is stated to have had a population of 40,000,000 inhabitants, the which population up to 1380 had diminished to 21,700,000. Thus there appears a marked decline even before a worse than Pagan set of fanatical priests had systematically commenced their horrible work of sacrificing 400,000 human beings to their Moloch, "Intolerance," at the shrine of that veritable institution of Satan, the Holy Inquisition. (Vide Herculano's "Historia da Inquisicao em Portugal," and Tonne's "Estadistica de Espana"). Formerly the numerous rivers and rivulate visition of water for the irrigation of varenies tracing and the page of water for the irrigation of varenies tracing and the property of water for the irrigation of varenies tracing and the page of water for the irrigation of varenies tracing and the page of water for the irrigation of varenies tracing and the page of water for the irrigation of varenies tracing and the page of water for the irrigation of varenies tracing and the page of water for the irrigation of varenies tracing and the page of water for the irrigation of varenies tracing and the page of water for the irrigation of varenies tracing and the page of water for the irrigation of varenies tracing and the page of the "Estadistica de Espana"). Formerly the numerous rivers and rivu-lets yielded abundance of water for the irrigation of extensive tracts of fertile land, and a large population was supported by abundant crops; but the sierras were denuded of their protecting forests, the water-courses and springs shrunk and dried up, and now, in once very fertile and densely populated districts, a scanty supply of crops on a very limited area can only be obtained by means of a tedious artificial irrigation. During my travels in the south, east, north, and very limited area can only be obtained by means of a reulous arrificial irrigation. During my travels in the south, east, north, and west of Spain I have come across numerous evidences proving that all the hills were once covered with forests, and that then the now dried up mountain streams were filled with water. The most recent observations, proving the great influence of forests upon water supply, have been made in the kingdom of Saxony and in Bohemia, and those observations were greatly facilitated by the fact of the River Elibe being the only outlet for all the water-course of Bohemia, and by these observations it was clearly ascertained that the average Elbe being the only outlet for all the water-courses of Bohemia, and by these observations it was clearly ascertained that the average quantity of the water entering Saxony from Bohemia has diminished almost in exact proportions to the gradual diminution of forest land in Bohemia. (Videreport in the Scientific Supplement to the Leipziger Zeitung about the beginning of 1867.) But for some of the most striking instances and proofs of the most intimate relationship between forests and water supply we must look to warmer climates, where the same causes produce the same effects with greater rapidity. In the valley of Aragua, in Venezuela (South America), is the lake of Tacarigua, whose water level, during two centuries of cultivation of its banks and corresponding destruction of surrounding forests, receded to such an extent that several islands were joined with its banks, forming hillocks in the lower ground that once had been part of the bottom of the lake, and the ground thus laid dry was soon covered with rice, sugar-cane, tobacco, &c., plantations. Subsequently, however, ceaseless civil wars caused agriculture to decline, and the dormant seeds of primeval forest trees again springing forth to life, the ground that once was plantation was soon covered with a dense jungle, and also the water of the lake rose again. (Vide the works of Baron Humboldt and Prof. Rossmaessler, &c.)

Boucingoult gives the diminution, in consequence of the cutting down of the forests, of three lakes situated on the plateau of New Granada (Columbia), one of which (the lake Fouquene) shrunk in 200 years from an area of 30 square leagues to 11 saugare leagues to 11 saugare

Granada (Columbia), one of which (the lake Fouquene) shrunk in 200 years from an area of 30 square leagues to 1½ square league. The same author mentions a spring in the island of Ascension which The same author mentions a spring in the island of Ascension when once yielded a good supply of water, but which diminished and dried up when the trees which covered the mountain had been cut down, but the water reappeared after the hills had again been planted with trees. I dare say the personal experience of many or your readers could furnish numerous instances of a similar kind. In France likewise the deprivation of the mountains of their forest covering has resulted in a diminution of water supply, and the occurrence of those disastrous floods which periodically devastate many parts of France can clearly be traced back to the same cause. I am under the impression of having years ago seen in a French official report on those inundations a suggestion of a remedy for preventing their occurrence, the chief feature of which suggestion was that, in addition to proper embankments, there should be constructed a number of dykes across the ravines and valleys of the smaller tributaries, which dykes would at any heavy rainfall stow up the water locally and in detail, as it at any heavy rannal stow up the water locally and in detail, as it were, and thus prevent the various streams from too suddenly joining with each other, and from thus forming those disastrous floods. But I am sure that a simpler, safer, and more efficient preventive consists in the replanting of the forests, as we shall see presently.

Many of your readers may have had opportunities of witnessing heavy rainfalls in mountainous districts, which were covered with forests, whose ground was covered with a thick vegetable forest soil, and with leaves and other castings of trees should start and with leaves and other castings of trees should see the safe and when the safe and

and with leaves and other castings of trees, shrubs, &c., and whose very rocks were coated with mosses; and they may also have observed

Vide my "Geological Notes on some Districts of Spain," in the Mining

similar rainfalls in mountainous tracts, destitute of forests, and where all other attendants of forest life were absent. They will surely have noticed, in the former instance, only a gradual, almost imperceptible, increase of the bulk of the water (say) of a given brook running down a ravine; and that water, comparatively speaking, would not be very muddy; while, in the second instance, in the treeless hills, the water-courses, by a similar heavy rainfall, would be swelled almost instantaneously to great size, and rush along with great turbulence, carrying earth, sand, and pebbles along with them. Now, say the quantity of rain fallen in each case was the same, and the difference in effect clearly arises from the circumstance that in the former instance many thousands of tons of water have been caught, and are stance many thousands of tons of water have been caught, and are partly retained, by the leaves, stems, branchlets, branches, and trunks of the trees and bushes, and shrubs, and heath; by the mosses grow-ing on the trees, and on the rocks, and on the ground; by the layers ing on the trees, and on the rocks, and on the ground; by the layers of forest-castings which cover the ground; by the—in dense forests generally thick—layers of vegetable soil; and by the very cleavages of the rocks which, near the surface, have been widened by the intruding rootlets and roots of the trees, shrubs, &c. Let us imagine all the rain-absorbing, retaining, and guiding surfaces of the above alluded to agents, spread out into one large, uniform, superficial area, and we shall find that such an area will be immensely larger than the actual ground covered by the forest, and that even a very large quantity of rain fallen from the clouds would only form a very thin layer when spread over that immense surface. A forest, in fact, leads the water that has fallen from the clouds, as it were, in leading-strings—absorbs part, and retains it in countless little reservoirs, and com-

quantity of rain fallen from the clouds would only form a very thin layer when spread over that immense surface. A forest, in fact, leads the water that has fallen from the clouds, as it were, in leading-strings —absorbs part, and retains it in countless little reservoirs, and compels the surplus to run in billions of divided tiny rills and streamlets, without great chance of robbing earth or sand, until they join with subdued force the rivulets and rivers. Where, however, the hills, &c., are not protected by a covering of forests and their attendants, all the individual rain-drops, falling directly upon the surface of the ground, would on every portion of a square inch of that ground be, as it were, heaped on the top of one another in rapid succession, but being liquid would spread and join with the nearest drops, forming small streamlets, which, joining, would form larger ones, and still larger ones; and in rushing down the hill-side, the grains of sand and other larger mineral fragments, would serve them as tools for excavating and tearing up more materials from the ground over which they run, and, laden with very many cubical fathoms of materials, derived from the surface whence they came, and over which they passed, they at last join the main stream, suddenly increasing its bulk, and producing disastrous inundations. But in such unprotected hilly ground, even every ordinary rain which does not produce inundations contributes, by carrying away solid components of the surface, to increase the area of barren rocks and sterile ground near the sources, and proportionately to increase the shallowness of the main stream, and of the seaports situated near its mouth. * *

When now, in conclusion, on the one hand, the disappearance of forests inevitably results in a diminution of water supply, and, on the other hand, it appears that a good supply of water may again be procured by replanting the forests formerly destroyed (for example, in Spain, France, Chile, and many other parts of the world), we may be justified i J. G. GUNTHER.

desert-like parts of Africa

THE DARIEN CANAL.

SIR,—Assuming that, by pursuing the course recommended in my last letter, the Association shall have succeeded in making the survey, obtaining the concession, and forming the company, it will then become necessary to devise means for the payment of a minimum rate of interest on the capital during the construction of the canal. This will be a matter of little difficulty, for considering that the company will have a legitimate claim upon the Governments of the principal partitions passions for add in the incention of a work fraught with such will have a legitimate claim upon the Governments of the principal maritime nations for aid in the inception of a work fraught with such beneficial results to the commerce of the world, doubtless an application to them will be at once responded to by the discharge of this obligation to the shareholders. Estimating the time that will elapse before the canal can be opened, and before any revenue can be derived from it, at four years, and the cost of construction at six millions sterling, and supposing that the Governments of England, France, Russia, Prussia, Austria, Italy, Spain, and the United States should pay between them 5 per cent. on the stock issued, the following would be the sums to be advanced by each of them:—

First issue of 11/2 million, for four years £37,500 Second , three years 28,125 Third , two years 18,750 Fourth , , one year 9,375

At the audience which the deputation from the Atlantic and Pacific Junction Company had with the Emperor of the French, in March, 1853, his majesty declared his willingness to pay all the capital that would be required for the work over and above 6,000,000*l*.; and also would be required for the work over and above 5,000,000.; and also to join England and America in guaranteeing 3 per cent. on the canal, and 1 per cent. for a sinking fund. A proposition was made by me some years ago to Lord Palmerston, the basis of which was that the different Governments should cut the canal at their joint expense, and then throw it open to the shipping of the world free of tolls; but the answer that I received was that the work must be done by private enterprise. The resources of each of the contributing States would be drawn upon your lightly to reake up a total of 6000 0000 which be drawn upon very lightly to make up a total of 6,000,000%, which would be 500,000% each for England, France, Russia, and the United States; 400,000% each for Austria, Prussia, Italy, Spain, and Portugal; 150,000% each for nine other maritime nations of Europe; and 46,500% each for the 14 South and Courted Awaring States.

each for the 14 South and Central American States,

The profits that would be derived from the canal would consist of
the tolls levied on ships passing through it. If we add to the 5,088,165
tons already quoted from the Board of Trade returns, 500,000 tons for tons already quoted from the board of fract results, so, and 2,500,000 places from which the returns are wanting, or incomplete, and 2,500,000 tons for China, the total will be upwards of 8,000,000 tons of shipping, which, at 5s, per ton tollage, would yield a revenue of upwards of which, at 5s. per ton tollage, would yield a revenue of upwards of 2,000,000l. per annum. Besides this, a large income would be derived from the sale or rents of lots of land which would be required for building the content of the sale or the sale or rents of lots of land which would be required for building the sale of the sale

from the sale or rents of lots of land which would be required for building on, as a "magic city" would soon spring up at either terminus; and at a later period land would be in demand for tillage and grazing farms, for the purpose of raising vegetables and rearing cattle, for the re-victualling of ships in course of transit.

The canal once cut, the expense of its maintenance will be trifling. It may, then, be assumed that the profits of the canal will pay an interest of 33 per cent. on 6,000,000%—the probable cost; and this would be always increasing pari passa with the increase of the commerce of the world. That the saving of money to the traffic between the Atlantic and Pacific which would be effected by the adoption of this passage would enable it to afford this large return, the statistics of trade and navigation abundantly prove. Rear-Admiral C. H. Davis, the Superintendent of the Naval Observatory, Washington, in his Report on Interoceanic Canals, drawn up for the Secretary of the Navy, in accordance with a resolution passed by the United States Navy, in accordance with a resolution passed by the United States Senate in 1866, calculates, from the incomplete returns for 1857, that the saving to the trade of the United States, England, and France by the Canal route, if then open, would have amounted for that year to 10,829,2961. 16s. He calculates the value of ships and cargoes which would have passed through the Canal that year at 105,262,0041. 5s. The political considerations which will arise upon the execution of

this work are exceedingly simple. The canal must not be under the control of any one of the great powers. It must belong to the world, like the oceans which it will connect. It must be the world's high way, open to the commerce of every nation. The neutrality of the isthmus must be guaranteed by all the powers, as also that of both oceans, to the distance of 2000 miles, or more, from each end of the canal. The first point has already been agreed upon, and the principle of the second has been admitted by the Governments of Great Britain and the United States in the second article of the Bulwer, and Clayton Treaty of 1850, which runs thus:—"Wessels of Great Britain, or the United States, traversing the said canal shall, in case of war between the contracting parties, be exempted from blockade, detention, or capture by either of the belligerents; and this provision shall extend to such a distance from the two ends of said canal as it may hereafter be found expedient to establish." The Times of Dec. 10, 1856, in an editorial on the Darien line, says "This work affects the common interests of mankind, and the more numerous the nations which are concerned in it the fewer are the chances that the free passage will be interrupted by the contingencies of future warfare." The sovereignty of New Granada over the isthmus was guaranteed by the United States by the treaty of Dec. 12, 1846; the former there, upon abolishing the custom houses, and agreeing to admit all foreign imports into the isthmus free of duty, with the exception of a small municipal tax.

In conclusion, it is not too much to say that this project is the grand.

municipal tax.

In conclusion, it is not too much to say that this project is the grand engineering, commercial, financial, scientific, moral, religious, and political problem of the age, which, when accomplished, will domore to civilise mankind than any other project. This cosmopolitan work, now before the public, once completed, will endure for ages a monument of man's enterprise, surpassing all others ever accomplished. In the words of the Times—"It is the grandest physical work the world can witness. The past has seen nothing like it, and any similar fame will be denied to the future, since there will be no more hemispheres to join." The Sun has said—"Ere long Darien will be the great interoceanic portal, the door of the seas, the entrepôt of the world, the storchouse of nations, the grand highway of commerce." And its execution will confer upon mankind greater blessings than mere monetary ones. All the commercial nations will join in guaranteeing the tary ones. All the commercial nations will join in guaranteeing the tary ones. All the commercial nations will join in guaranteeing the neutrality, not only of the territory through which it will pass, but also of the seas for 2000 miles or more from either terminus. The coasts will become common ground, where war shall not approach. This is the way towards securing universal peace. The Greeks had their games, so that they might meet on common ground once a year. The Isthmus of Darien will be common ground every day in every year, where all the nations of the earth will meet in peace. E. CULLEN, M.D.

LA PLATA STATES.

SIR,—Every well-wisher to the progress of civilisation in South America will heartily join in the wish, so well expressed in last week's Journal, that the sooner an end were made of that unfortunate war against little, but industrious and pushing, Paraguay the better, a war which was forced upon Uraquay, Brazil, and the Argentine Republic by the injudicious proceedings, want of forethought, and the vanity and ambition of some of their leading citizens. As shown by the account of the Allies themselves, there is every probability, before they will be able to enter the Paraguayan capital (Assuncion) they will have to walk over the bodies of almost all the Paraguayans who are able to carry arms—so determined is the resistance of that despised little "na." walk over the bodies of almost all the Paraguayans who are able to carry arms—so determined is the resistance of that despised little "nation of cowherds and shopkeepers." A glance at the map of South America shows that that little, but evidently well-governed, bee-hive of industry is so situated as to be on all sides in contact with the least explored, least populated, and least developed parts of Brazil and the Argentine Republic, and that it would, by its peaceful relations with those parts, have contributed immensely towards a rapid development of their large but dormant mineral, agricultural, and other resources; but this stupid war will throw back these countries many scores of years. Is the fact that so little attention is paid to Paraguay* owing to the circumstance that that state did not borrow heavy sums of money from John Bull 3

s of money from John Bull 3
ct, 8. ONE WHO DOES NOT BELIEVE IN BLOODSHED AS A
CIVILIZER OF YOUNG NATIONS.

A pamphlet on "Paraguay" (Effingham, Wilson, Royal Exchange) gives an eresting summary of its history, resources, &c.

MINING IN IRELAND.

GYPSUM IN THE COUNTY OF MONAGHAN,

GYPSUM IN THE COUNTY OF MONAGHAN.

SIR,—Referring to the article in last week's Journal, on gypsum being found in the Cleveland district in strings or branches, like the roots of trees, and which is being worked with great satisfaction by the owners, we may call attention to what is being done in this mineral on the Shirley Estate, near Carrickmacross. Several years ago the late Mr. Shirley discovered gypsum at this spot, where he opened a quarry, built a mill, and commenced the manufacture of plaster of Paris, &c. At his decease the works were stopped, and lay dormant until about three years ago, when a lease of the royalty was taken by John Carruthers and Co., of Carlisle. They had not been long at work before they found themselves at sea among the strings and branches discovered by Mr. Shirley. Seeing there was no good to be done among these straggling branches, they commenced a systematic plan of boring, and soon came upon a deposit above 50 feet thick. There they sunk a shaft, which was perfectly dry until they got about 10 feet into the rock, when they were driven out by a large feeder of water, nearly causing the abandonment of the enterprise. They, however, erected a steam-engine and pumps, which soon overcame the water, and they are now raising large quantities of rock of firstrate quality. They have also refitted the mill with the most approved machinery, for the manufacture of gypsum, plaster of Paris, and mineral white, which is sent to Dundalk, for transmission by rail to all parts of Ireland, and by sea to England and Scotland.

THE NEW PROCESS FOR MAKING CHLORINE.

THE NEW PROCESS FOR MAKING CHLORINE.

SIR,—Very greatly against my will, and at the urgent solicitation of two chemical friends, who insist that it is imperative upon me to reply to the last shallow argument adduced in Mr. Weldon's letter, regarding the set and dry process of recovery or regeneration, I will do so, but as briefly as possible. Although mostly using the dry process of recovery, as deeming it then and new better than the wet, for I have never yet seen what I have asked for—the ceri-ficates of well-known and responsible chemists in support of Mr. Weldon's allegations—yet I have used the wet process, as produced by the simple contact of atmospheric air upon the precipitated protoxide by mere exposure. Nor can such process be a secret to anyone who has ever precipitated the oxide of manganese at all, as witness the following quotation, among very many which could be brought forward:—"When alkalies are added to solutions of these comes brown by passing into a higher state of oxidation." (Howness's chemistry comes brown by passing into a higher state of oxidation." (Howness's chemistry which edition, page 32s.) But all this proof and argument are truly and positively wasted upon a worthless nothing. Let any reader refer to Mr. Weldon's spatent, No. 1348, date 1866, is for "Improvements in making chlorine," and no improvements in making chlorine are described. The tunprovements described are chlorine itself in Mr. Weldon's specification is made in the old humdrum way, now and long since in use among manufacturers, and described in every elementary work on chemistry—by heating a mixture of hydrochloric acid and manganese. But Mr. Weldon's specification is made in the old humdrum way, now and long since in use among manufacturers, and described in every lementary work on chemistry—by heating a mixture of hydrochloric acid and manganese. Frecovered in second manganese, prepared in such peculiar way, and no for the manganese, recovered in heating an introduced to the hardon of the chlorine, in which there i

and his colleagues for worming out my secrets, and not raining such as faithfully promised.

Again, with regard to Mr. Walter Weldon, and as one sample among many of the truthfulness of this person, he says of me "He has claimed to have invested the method of bleaching by means of chlorine water, which was introduced by the method of bleaching by means of chlorine water, which was introduced and may do so again, but where have I claimed to have invented it? If in these and may do so again, but where have I claimed to have invented it? If in the letters, or in any publication whatever, he gan show that I ever did make such

a claim, he will go some little way to prove that his word is worth something. If he cannot prove this, your readers raust draw the only inference which is open to them. With regard to three of the letters at least, and as far as venomous inspiration and elaborate top dressing are concerned, I may observe that they bear the unmistakable Weldonian stamp. To the low abuse with which they abound it is beneath me to offer a rejoinder, but as fars at he charge of falsehood is concerned, which Messra. W. Weldon, C. Townsend Hook, and W. Thomas so greenously urge against me, if fling it back to them as a part of their proven greenalty, with the fullest allowance of compound interest which justice may require or liberality bestow.

ISHAM BAGGS.

regular or liberality bestow.

p.g.—As Mr. Weldon has deemed it advisable to criticise my patent for hydrologic acid, which he was perfectly welcome to do, I have taken the liberty to charm the more closely than hitherto his patent for "making chlorine." This is a labour which has been imposed upon me; and lest my views in regard to this said patent should be considered in any way invidious, I have thought it needful to obtain, in addition, a professional opinion upon the subject. This opinion, which is here appended, is from a gentleman so well known that comment is superfutous. I will merely observe, in a passing way, that as a patent agent he holds the confidence of many of the first men of the day.

IN RE WELDON'S PATENT, No. 1948, 1866.

IN RE WELDON'S PATENT, No. 1948, 1866,
Invention for "Improvements in the Manufacture of Chlorine," the patent for which is dated July 26, 1866. The opinion at which I have arrived is, that the patent for question is invalid, and could not be sustained in a court of law, but I wish it to be considered that this opinion is not based upon the merits of the alleged invention, which in itself may be of value, but upon the construction of the specification. With regard to the originality of Mr. Walter Weldon's processes, it would require much more time than I have been able to devote to the splicit to enable me to express a fair opinion. I may state, moreover, that this opinion is given professionally, as I have no desire to enter into the controversy which is now being carried on by Mr. I. Baggs and Mr. W. Weldon in the Menting Journal.—54, Chancery-tane, Oct. 8.

E. P. H. VAUGHAN.

THE NEW PROCESS FOR MAKING CHLORINE.

THE NEW PROCESS FOR MAKING CHLORINE.

SIR,—Again, in last Saturday's Journal, Mr. Baggs meets my plain statements of facts with mere abuse, garnished, as usual, with altegations which are not true. The abuse answers itself; the untrue altegations which are not true. The abuse answers itself; the untrue altegations I will very quickly dispose of. One of them is that the number and date of my "celebrated specification for he manufacture of chlorine" are 1948, a.D. 1867. This is not the fact. The real date of the patent in question is July 26, 1866. Why Mr. Baggs should have thus post-dated it at least a year, and how much his doing so is of a plece with all his other conduct in this matter, I need not point out.

Another untrue allegation is that the specification in question leaves in doubt the signification of "Hn" in the equation which Mr. Baggs has quoted from the printed copy. The sentence in which that equation occurs is this:—"The reaction upon which the process is based being that which is represented by the equation—9H Cl+Mn O2—2HO+Mn Cl+Cl, even if the percavite of manganese employed were absolutely pure, only one-third of the chlorine in the hydrochloric cell said would be obtained in the free state, the other half entering into combination with the metallic base of the peroxide, forming therewith chloride of manganese, which is usually thrown aceay." In the printed copy of the specification, instead of "Mn," In this passage, "Hn" is put, but the words which immediately follow so distinctly show that by "Hn O2" and "Hn Cl" are signified "peroxide of manganese" and "chloride of manganese" that even Mr. Baggs cannot be so unintelligent as to have failed to perceive that "Hn" is, in both instances, merely one of those printer's errors with which, owing to patentees not being allowed to see proofs of their specifications, the printed copies of chemical specifications, especially, nearly always abound. The use which he has tried to make of this evident misprint is but another instance of that deliberate dis

disingenuousness of which, in the course of this matter, he has given so many examples.

Another untrue allegation is that Mr. Baggs drew up the notes of his experiments at the Soho Milis "in a certain rough and defensive cypher," deliberately using symbols intelligible only to himself. His doing so would have been an act of gross dishonesty to his employers; but, of course, that consideration, of itself, does not prove the self-accusation to be untrue. No one, however, possessing knowledge of such matters can see and examine for a moment the notes in question without perceiving that it is impossible that they can owe their characteristic peculiarities to anything more reprehensible than pretentious ignorance.

Another untrue allegation is that the "testimonials" appended to Mr. Baggs's last preceding letter prove that he practised my process at liftord and Maidstone; the fact being, as your readers now very well know, that the process which at those places he attempted, but confessedly failed, to render available, instead of being, as mine essentially is, a net process, performed in a furnace, and, instead of having been recently invented by Mr. Baggs, was invented by the late Christopher Binks, and was patented, tried, and abandoned nearly a quarter of a century before Mr. Baggs attempted to introduce it as a new conception of his own.

MALTER WELDON.

MALTER WELDON.

THE FUTURE PROSPECTS OF CORNISH MINING.

THE FUTURE PROSPECTS OF CORNISH MINING.

SIR,—There cannot be a doubt but that it is unwise for the rich mines in Cornwall and Devon to return so much ore as they do at the present low standard or price for copper ore. With a standard of 109 or one of 140, the difference to such mines as Devon Consols, South Caradon, the Wheal Setons, and many other productive mines is something enormous at the end of the year; but, say some adventurers, the dividends must be kept up, or down will go the price of shares. A very poor excuse for throwing away thousands of pounds annually. When the great discovery of lead occurred in Spain, about 35 or 40 years ago, some lead mines in this county were returning from 500 to 800 tons of lead ore per month. The price of lead ore dropped from 12t. to about 6t. 10s, per ton, in consequence of the increased supply thrown upon the market. The Milwr Mine was returning about that time 700 tons of lead ore per annum, and in seven years paid dividends to the amount of 139,000t., but what would the dividends have been, provided they returned about enough ore to pay 10 per cent. only on the capital during the seven years this lead continued in Spain? But at the expiration of this time this mountain of lead, that was going to leat for ever, cut clean out, and up went the price of lead ore to the former figure—12t, per ton. This Milwr Mine must have lost to the company about three to four hundred thousand pounds during this period. The writer of this knew the largest proprietor in the above-samed mine intimately, being a neighbour of his for several years.

No doubt the high price of tin and copper during the interval between the panic of 1887 and that of 1866 caused the world to be ranasched for these minerals wherever they could be found, but the falling off in the supply since the great drop in price is now beginning to be felt, not only in the supply in the form the Butch Settlement, but from the great copper-producing countries as well. We see from the reports of recent meetings that those SIR,-There cannot be a doubt but that it is unwise for the rich

THE PRICE OF COPPER-WHO IS RIGHT?

not use the word in any offensive manner, but merely to elicit the opinion of John Pales and the price of copper is the anticipation of imports from Chilibeing rather in excess of what had been looked for by the trade; but it is the general opinion that after the advices by the next two or three mails there will be a gradual reduction of imports, in consequence of the heavy loss sustained by slippers through the low prices which have ruled so long." In the following week's Journal, however, I find upon perusing the proceedings of the Cober Copper Company meeting that Mr. H. B. Grenfell, M.P., the well-known copper smelter, in expressing his opinion upon this point, stated that "owing to the large quantity of ore coming forward from Chill, he did not look for any great rise in the price of copper." I have to applogise for making your columns the medium through which I hope to obtain some more precise information.

Oct. 8,

A SHARKHOLDER IN COPPER MINES.

MINING IN THE GOLDSITHNEY DISTRICT.

MINING IN THE GOLDSITHNEY DISTRICT.

Sir.,—I am glad to say that I discern the dawning of a better day on this district, as far as copper and tin mining is concerned. I have just been over a discovery made by a shaft on the Prosper south lode, in Genr's farm, 200 fms. west of this shaft. On the same lode they are raising at Wheal Prosper sou to non of good copper ore per month. I do not know what this new mine is to be called. have heard it suggested that it be called Wheal Thomasine, but, whatever the name, the heap of stuff drawn from the shaft is composed of the most beautiful gossan, with a good quantity of tin; altogether it is worth 200, per fm, and in my candid opinion it is up-cropping of one of the greatest and most extensive copper formations yet found in the western district. The lode is seen orey, we nicelute the rich part of it in Wheal Prosper, for fully a mile in length, and as far as I can see everywhere is profitable ore ground. It is a source of sincere stiffaction to be an eye witness of returning prosperity to a country that I have watched with Intense interest for 40 years.

MATTHEW FRANCIS.

WHALL MERSHAMERS.

WHEAL TREVENNA, AND ITS MANAGEMENT.

Sim.—I apprehend that the dismissal of the petition to wind-up this company will not suffice to reasonre the dismfrected shareholders, unless the present beard be superseded, or so modified as to inspire confidence that the funds will be judiciously managed. From personal observation I can bear testimony that the promoters of the movement in Manchester, to attain the above object, were actuated by the purest motives for the true interests of the company; and if those deabtful of their intentions had the same opportunity, they would acquit them

of the charge of having "ulterior purposes"—"collusion with the traditiona lawyer," or sympathy with Mr. Ledgard.

To such an extent has distrust existed among the shareholders, that on enquiry I find that the "forms of assent" to the resolutions which emanated from the meeting in Manchester, on Aug. 19, were affirmed by those who hold several thousand pounds of share capital. Are the statements of Mr. Jennings gross fabrications? It appears that previous to his discharge, recrimination had existed at head-quarters for some time past. Mr. Nevill accused Mr. Jennings of neglecting the interests of the company; the latter accused the board of misappropriation of funds to a large amount. As it is evident there is something seriously wrong in financial affairs, I would urge the shareholders, in the event of not changing the board, to give Mr. Jennings a locus stands in the company, so that he may have an opportunity of substantiating his statements personally at the annual meeting, by a rigid inspection of the accounts of the company, or to receive that censure which he would justly merit.

A SHAREHOLDER.

MINING, METALS, AND MINERALS-PATENT MATTERS, BY MICHAEL HENRY,

Patent Agent and Adviser, Memb. Soc. Arts, Assoc. Soc. Eng.

Patent Agent and Adviser, Memb. Soc. Arts, Assoc. Soc. Eng.

Mr. Andrew Howat, of Farnworth, near Bolton, in Lancaster, has specified a patent for machinery for mining, outting, or working coal and other minerals. The machinery consists of cutters propelled against the coal by a piston, fitting in a cylinder; the piston is acted upon by steam, or compressed air, which is admitted into the cylinder by a valve. During the return stroke of the piston the air, or exhaust steam, makes its escape through a side passage in the supply valve. The cylinder, or cylinders, and the outtors are mounted on a stand, connected by joint or otherwise to a frame with wheels running on rails in the mine, and as the frame is pushed forward the cutters make a horizontal groove of any length and depth in the face of the coal. The same machine may be used for cutting vertical or other grooves in the coal. After the grooves are cut the coal is got out in the usual way. In cutting grooves in rock, for tunnelling and other purposes, the machine must be adapted to the particular object to be attained. When the invention is applied to hammering metals, or crushing minerals, the piston is made to act on the hammer, or stamper, in the same manner as on the cutters above described.

Mr. A. L. HOLLEY's specification relates to manufacturing iron and steel. The improvements chiefly consist in casting two or more ingots in ordinary separate ingot moulds at one pouring or teaming. For this purpose, a group of ingot moulds, made of cast-iron, or lany material, are placed around a central ingot mould somewhat higher than the others. All these moulds are set upon a "distributing bottom," which consists of a box or flask filled with moulding sand, or other moulding material, in which are moulded sprues or runners connecting the lower end of the central mould with the lower ends of the surrounding moulds, being stopped with vented loam stoppers, or covered with cast-iron plates coated with loam, and properly vented. The metal is run out of the ladic in

Mr. Thomas Archer's specification relates to breaking and grinding stone ores, and other hard materials. The object of the invention is to produce a cleaving effect on the stones, or other hard substances, by the forward motion of one set of the knives, or breakers, and at the same time to withdraw the other set of the same, so as to prevent undue crushing, and consequent waste of the stones or material under operation. When it is required to adapt this machine to grind or crush the material passing through it, two rollers are mounted in the frame immediately beneath the knives, having their surfaces only a slight distance apart; these rollers are driven slowly in opposite directions by means of spur-gearing, from a philon on the main shaft. In connection with one of these rollers is a strong spring bar, which bears against the slide blocks in which the roller is carried, and allows it to yield in the event of a piece of iron, or other similar material, getting between the rollers, or if by any other means an undue pressure or strain should be brought to bear upon the said roller.

THE LATE MR. PARKIN JEFFCOCK.

THE LATE Mr. PARKIN JEFFCOCK.

Those who regard mining as nothing more than a highly speculative field of investment, in which vast sums of money are often lost, and princely fortunes sometimes made, take but a limited and unreal view of the actual state of the case. There is no pursuit, for instance, which requires a wider range of scientific acquirements. A superficial acquaintance with the sciences of geology, mineralogy, and chemistry will not suffice; a careful, nitimate, and extensive cognizance of all known and registered facts must be added to theory, and all brought to bear, more or less, on the work in hand. But this would in most cases be of little avail without a great variety of mechanical contrivance, special inventions to meet peculiar and hitherto unheard fying, and adapting to the circumstances of the moment known principle and accepted plans. The two great objects now to be kept in view are the safety of the large numbers of workpeople employed, and the economical and profitable management of the mine, and for these purposes, if they are to be successfully attained, no suggestions of science, no applications of mechanical power or contrivance, no personal ability or service, should be deemed too coastly; and, to the men who carry on the labours of the mine? The rank and file of the army have their intelligence educated and matured by the nature of their employment, and often exhibit great powers of observation; while the officers, from the engineer down to the underviewer, or fireman, possess an amount of knowledge far beyond that to be found in any other branch of labour. They ply the pick, or cleat or oversight, or the breakage of a single lamp, may defeat the wise precautions of the engineers, and prove fatal to hundreds. Every day lives are lost by ones and by twos, it some districts by fails of roof, in others by fire-damp or choke-damp, or shaft accidents, and so in single lamp, may defeat the wise precautions of the engineers, and prove fatal to hundreds. Every day lives are lost in the

GUN-COTTON.—In the opinion of Messrs. Pelouze and Maury, Gun-Cotton is susceptible of spontaneous decomposition and explosion at very low temperatures when stored in considerable quantities. In a paper read to the Royal Society, Mr. F. A. Abol, F.R.S., described certain experiments carried on at Woolwich during the last four years, both with large and small quantities of gun-cotton, for the purpose of completely investigating the conditions of stability of this substance. The following are the facts ascertained:—1. Gun-cotton prepared according to Von Lenk's method may be exposed to diffused daylight, either in the open air or in closed vessels, for very long periods without undergoing any change. The preservation of the material for three years and a-balf under these conditions has been perfect.—2. Long-continued exposure of the substance in a condition of ordinary dryness to strong daylight and sunlight produces a very slow change, so that there is no rapid decomposition whatever.—3. If gun-cotton in closed vessels is left for protracted periods exposed to strong daylight or sunlight in a damp or moist condition it is affected to a somewhat greater extent.—4. Gun-cotton exposed to sunlight until a faint acid reaction has become developed, and is then immediately afterwards packed into boxes tightly closed, does not undergo any change during subsequent storage for long periods.—5. Gun-cotton prepared and purified according to the prescribed system, and stored in the ordinary dry condition, does not furnish any indication of alteration beyond the development, shortly after packing, of a slight peculiar edour, and the power of gradually imparting to litmus, when packed with it, a pinkish tinge.—6. Exposure to temperatures considerably exceeding those of tropical climes exercises no influence; gun-cotton may be conveyed with loss of tropical climes exercises no influence; gun-cotton may be conveyed with loss of tropical climes exercises no influence; gun-cotton may be conveyed with loss of tropical climes exercis GUN-COTTON .- In the opinion of Messrs. Pelouze and Maury, Gun

temperature approaching to boiling point.—8. Common gun-cotton contains organic impurities, which develope free acid when exposed to heat.—9. Gun cotton treated with 1 per cent. of carbonate of sods will resist any serious change; and the only consequence of this addition is a small increase to the little smoke emitted during combustion.

Meetings of Public Companies.

MOSQUITO LAND SECURITIES.

A meeting of gentlemen interested in Mosquito Land Securities was held at the London Tavern, on Thursday, to consider the condition of those securities, and to appoint a working committee, with a view to establish their claims, and to put the securities into a marketable shape,—Mr. CHARLES WING was called to the chair.

The CHAIRMAN said that he could not do better than explain how it came to pass that the present meeting had been summoned. Gen. Martinez.

to came to pass that the present meeting had been summoned. Gen. Martines, late President of Nicaragua, had arrived in London about the middle of August last on a special mission to our Government, chiefly in reference to Mosquito, a country in which they were all deeply interested, and in which most of them had embarked larges sums of money. As soon as the general's object was known to him, through the following letter, which appeared in the papers:—

NICARAGUA AND MOSQUITO.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Permit me, through the medium of your columns, to inform those of our commercial community interested in Nicaragua and Mosquito that Captain-Gereral Martinez and Senor Marcoleta, the able and talented Nicaraguan minister, have just arrived in London. General Martinez has been President of Nicaragua for the last 10 years, and is now in London for a short time on a special mission in reference to Mosquittan affairs, Nicaraguan debt, &c.

BEDFORD PIM.

Central American Association, 4, Westminster-chambers, Victoria-street, S. W.

special mission in reference to Mosquitlan affairs, Nicaraguan debt, &c.

BEDFORD PIM.

Central American Association, 4, Westminster-chambers, Victoria-street, S. W.

He lost no time in calling upon Captain Bedford Pim, and was received by that gentleman with the greatest courtesy and kindness. Capt. Pim informed him that he was deputed by the Mosquitlans to look after their interests, and that he lead informed Lord Stanley of that fact in a letter, dated Aug. 12, but that inasmuch as he was personally acquainted with General Martinez, and knew his wishes, he thought there would be no difficulty in at length effecting a settlement of the Mosquito question in a manner satisfactory to all parties. On Aug. 23 the banquet, which had been got up by Capt. Pim, in honour of General Martinez, and at which he (the Chairman) had the pleasure of being present, came off with great celd, it was well reported in the daily papers, but the most complete account would be found in the Mining Journal of Aug. 31. Any gentleman who would take the trouble to read the account of this banquet could not fall to be convinced of the friendly feeling entertained towards Gen. Martinez by Capt. B. Pim, and he felt convinced that the general reciprocated the sentiment. It was most important that they should be made aware of this fact, for if the representatives of Mosquito and Nicaragua went into the subject in a liberal, friendly spirit good results could hardly fail to ensue. The opening thus afforded by the mission of Gen. Martinez for the satisfactory settlement of their cislams was at once taken every advantage of. A meeting of a few gentlemen interested in the matter took place on Sept. 2, when it was decided to appeal to Lord Stanley on the subject; another meeting, much larger, on Sept. 16, and on the following day a deputation had the honour of an interview with Lord Stanley. He (the Chairman) could only say that he was delighted with the manner in which the deputation had been received, and very hopeful from the kind consideration

allowed to mention that the company already possessed several properties in that part of the world, amongst which the famous Javail Mine, which would, probably, soon be brought out.

Capt. BEDFORD PIM said: Gentlemen, I can do no less, after the very flattering manner in which the Chairman has alluded to my services in the matter of Mosquito, than say a few words on the political aspect of Mosquito and Nicaragua at the present time. In 1860 a treaty of Triendship, commerce, and navigation was ratified between Great Britain and Nicaragua; and at the same time another treaty, commonly known as the treaty of Managua, axa slovatified, "relative to the Mosquito Indians, and the rights and claims of British subjects." I was at Managua at the time these treaties were before Congress; again, in May last (1867), I was at Blewfields, on the Mosquito coast, and then accepted the trust conferred upon me at a public meeting held at that place—"to protect and deferd the interests of the inhabitants of the Mosquito Reservation in such a manner as shall seem best." I mention this to show you than I have a practical, not a theoretical, knowledge of the questions in which you are so much in "rested; but, more than this, I happen to be a personal ricend of both parties—Nicaraguans and Mosquitians—and, therefore, I am strongly our claims to a just and impartial arbitrament. It is quite true that Nicaragua has neither settled with the bondholders in this country, nor fulfilled the terms of the treaty of Managua towards the Mosquitians, but I am so thoroughly satisfied that the delay has arisen from exceptional causes, and is repugnant to the honest feelings of Nicaragua, that I firmly believe It is only necessary to polity out to General Martinez, but if addition to the call of justice, it is very expedient for Nicaragua to allow them, since by doing so she favours an established organisation for promoting emigration, and colonisation of her waste lands, such as she has long professed most ardently to desire. I can promise you to g

to say a few words on the climate and physical aspect, especially of the Mosquito coast; and combined, I venture to say, you to call on Dr. Berthold Seemann to say a few words.

Dr. SEEMANN said: In 1866 I was deputed by the Central American Association to explore the north-eastern parts of Nicaragua, and my journey brought me within the ground claimed by the Mosquito bondholders. Leaving the city of Leon, and pushing my way north-eastwards, I came, after three days' ride, to a most delightful country and climate. There was no more of that sultry and oppressive heat one feels in the coast region of tropical countries, but a climate much resembling that of England in the mouth of May. The rank vegetation of the lowlands was exchanged for oak and pine trees, some of the latter forming extensive forests, and often attaining as many as 150 ft. in height. Here and anon were extensive tracts of grazing land, which in my letters to the Atheneum I strongly recommended for sheep runs. The principal object in going to this district was to examine the Limon Silver Mine, 20 leagues cast of Ocotal, the capital of New Segoria, and worked with great profit by the natives, but abandoned because the hand-pumps employed were not powerful enough to draw out the water. In my examination I was assisted by Captain John Holman, a practical miner of great experience, and we took advantage of the opportunity to make ourselves thoroughly familiar with all the other mines near that of Limon, as well as those of Deplito and Marquellza. The whole district I am now speaking about is principally argentiferous, but there are also rich gold washings in the various partines, and some extensive lodes of antimony ore. I have no doubt that if it were subjected to a thorough geological examination rich mines would be discovered, for it should be remembered that the rock of the Javali, the richest and most famous mine in the country, has now been proved by geological examination are aware that there is a water communication between the Limon Mine di

erroneous opinions have been entertained, and are, perhaps, entertained at the present time by some of the gentlemen here to-day—the natural resources and capabilities, and more sepacially the climate, of the country lying between Lake and provided that the country lying between Lake Mosquito Indians, now split up by the absorption of the larger part into the Republic of Nicaragua. Having twice explored this tract of country—once in 1863, and again in the early part of this year—and having lead the only party which has ever succeeded in penetrating through the primeyal forest, from the lake to the former I can bear the strongest evidence to the innate fertility of the soil: ties, as also of practically testing the healthiness of its climate. In reference to the former I can bear the strongest evidence to the innate fertility of the soil: its natural productiveness is, perhaps, unrivalied; its virgin woods, hitherto the former I can bear the strongest evidence to the innate fertility of the soil: the natural productiveness is, perhaps, unrivalied; its virgin woods, hitherto the health of the soil of the so

CAPE CORNWALL (CONSOLIDATED) TIN AND COPPER MINING COMPANY.

CAPE CORNWALL (CONSOLIDATED) TIN AND COPPER MINING COMPANY.

The ordinary general meeting of shareholders was held at the offices, New Broad-street, on Thursday,
Mr. Hennry L. Prillips (managing director) in the chair.

The notice convening the meeting was read. The report of the directors stated that the principal points of operation are the development of the Cape lode in the eastern or the producing ground, and the extension of the 70, upon this lode, in a westerly direction, where an intersection with a cannter lode has been for a long time anticipated, and which intersection it is expected will be attended with very favourable results, as under parallel circumstances the neighbouring mines of Levant and Botallack have found exceedingly rich deposits of copper, from which sources they have been enabled to give immense profits to their shareholders. The lode has been dirive upon about 130 fms. west from the engine-shaft, at a very great cost, and for the entire distance has been unproductive, although a promising-looking lode, but as the principal object is considered by all practical men to be its intersection with the cannter, the present unproductive, although a promising-looking lode, but as the principal object is considered by all practical men to be its intersection with the cannter, the present unproductive agreess the interpolino in favour of deposits of copper being found in the western ground, and this opinion has been given, notwithstanding the uniform poverty of the lode in the extension of the levels in that direction. As a proof, however, of the extrectness of the opinion so expressed, the directors have pleasure in stating that although the intersection of the Cape lode with the great cannter lode has not yet taken place, yet another cannter lode has been intersected, and has already exercised a beneficial effect as regards the productiveness of copper. Just previous to this intersection it was found that the lode was undergoing a consilerable change for the better mundle, with stones of yell

The CHAIRMAN said, that although it was quite true the report just submitted did not present an immediately prosperous position, yet he could not help thinking—and he was not speaking without a considerable knowledge of the subject—that, as compared with the position and prospects of their property upon the last occasion he had the pleasure of addressing the shareholders, a most material improvement had taken place. (Hear, hear.) At the holders, a most material improvement had taken place. It would, no doubt, he is the recollection of every shareholder that the primary object for which the Cape Cornwall Company was established was for the purpose of opening up the western ground, it being assumed by every practical miner in the district, as well as by every other practical authority acquainted with the mineralogical characteristics of the locality, that during the exploration discoveries would be made of an equal value to those in the Botaliack and Levant Mines. They were all aware that the Botaliack adventurers realised their wealth from the development of their western ground, situated under the sea; and the ground in Cape Cornwall Mine was composed of precisely similar strata, and found nider similar geological conditions. As the caunter had not been seen except at surface, it was impossible to accurately define its actual direction, and the object he had in view in forwarding to the shareholders the sketch of the mine which accompanied the report was that they might the sketch of the mine which accompanied the report was that they might the sketch of the mine which accompanied the report was that they might the other maderstand the supposed direction of that caunter, as also the position of the lode upon which they were at present driving. Some four months since an improvement took place in the Cape lode, and which, as far as appearances went, induced the belief it would produce ore, and a great deal of water issued from the end, giving the impression they were nearing the interescion of the cross lode; and The CHAIRMAN said, that although it was quite true the report just

the Cape turning out a profitable mine. It was, of course, a matter of regret that Cape Cornwall had not yet been brought into a profitable state, but there seemed increasing reason to hope that when the intersection was reached they would be well and substantially rewarded for their patience and outlay. As to the eastern part, it had peen in contemplation to sink the engine-shaft, but seeing they had two important points to attain, in addition to the extension of the lof fathem level into the granite, the tin-producing strats of the St. Just district, the directors had not thought it wise to continue for the present the sinking of the engine-shaft. Their expenses were now reduced to a minimum, and the 100 was looking much better for tin, and he believed they would soon find that the returns from the eastern ground would materially assist the costs. If they should realise an improved price for their tin they would be, he hoped, something like an equilibrium between the expenses and receipts. He concluded by moving that the report and balance-sheet be received and adopted.—Mr. ELLis had much pleasure in seconding the proposition.

The CHAIRMAN, in reply to a question, stated that he thought the subscribed capital would be sufficient to fully prove the points in operation.

Capt. RICHARD PROR stated that he had discussed with the board the question of sinking the engine-shaft, and they agreed it would hardly be prudent to do so at presont. As soon as they drained the 90, by intersecting the granite in the 100, they would raise sufficient tin to pay the costs. There was no doubt that in Cape Cornwall they were going to have at in as well as a copper mine. It was impossible, as the Chairman had said, to see the precise point at which the caunter would be intersected, but the present indications induced him to believe it would be reached in a few weeks hence.

Mr. BOLDERSON enquired the width of the lode —Capt. Privor said the lode was about 4 ft. wide.

The CHAIRMAN said that Botallack never looked poorer than two

Arter some function discussion, we have the some function to the form the two put and carried unanimously.

Mr. Ellis, the retiring director, was re-elected, and Mr. Warwick (public accountant) was re-appointed auditor.

A vote of thanks to the Chairman terminated the proceedings.

ISLE OF MAN MINING COMPANY (LIMITED). DISCOVERY OF A NEW ORE.

The fourteenth annual general meeting of this company (better

The fourteenth annual general meeting of this company (better known as the Foxdale) was held at Chester, on Monday, Sept. 30, Mr. Thomas Dixon in the chair.

The accounts and reports were laid before the meeting. The former showed that the stock of the company is 70,0001, in 2800 shares of 52, each. The estimated value of the plant, works, and buildings is 70,0001. The revenue account showed that the sales of ore during the year had amounted to 33,4754,38,9d, The total amount on the credit side was 38,516,16s. 8d. The working expenses had been 29,4164, 16s. 9d.; royalty, 27341, 7s. 9d.; and during the year dividends had been pald to the amount of 56001. The balance in hand was 15361, 18s.

The directors' report states that "considering the continued low price of the metal market, the directors think they have good grounds for congratulating the shareholders on the profits realised. Some of the trials which have been carried on during the past twelve months have been remunerative, and given encouragement to persevere; and though others have not been so, yet it must be borne in mind that such trials are essential to the continued prosperity of the mine. Your directors are glad to be able to report a rather better appearance in the 115, a feature in the mines, which will be watched with interest. The finding of the smail quantity of extremely rich silver ore, at the eastern portion of the fine, is encouraging, not only as it may be hoped more ore of a similar kind may be found, but as indicative of increased value of the mines in depth. The quantity of ore raised during the year has been 1569 tons."

The report of the manager, Cant. J. Lew Thomas, was so very lengthy

of the small quantity of extremely rich silver ore, at the eastern portion of the fine, is encouraging, not only as it may be hoped more ore of a similar kind may be found, but as indicative of increased value of the mines in depth. The quantity of ore raised during the year has been 1685 tons."

The report of the manager, Cant. J. Lee Thomas, was so very lengthy that we can only give a summary that the the "Old Foxdale Mine is a new reached a depth of 15 fms. has now reached a depth of 15 fms. has now reached a depth of 15 fms. has not opened up so productive as har been expected, but as they had still before them in the eastern driving 150 fms. of ground, which had proved to be ore-bearing in the upper levels, they confidently looked forward to better fortune in the year upon which they had entered." In the roofs of the 160 east the manager states "there are five ore bargains working, which are producing together about 14½ tons of ore monthly. In the most eastern of these piches we have met with an ore hitberto unknown to exist in the laie of Man. This ore—fablerz—(tetrahedrite) is a valuable -liver ore, and is a very encouraging feature in this section of the mine, the more so as in the Harz Mountains and in other localities where it has been met with, it has been found in many instances to give increased value to the mines in depth. The fablerz of Foxdale Mine is found to exhibit the same tendency to become coated with copper pyrites that is elsewhere observable, and the gangues accompanying it, spathose iron and quartz, are also similar." The manager then gives an account of the workings at the various subsidiary undertakings connected with this great mine—Maghie's Mine, Hodgson's Mine, Dixon's Mine, Bockwith Mine, and the North Gili vein. He concludes with the following general remarks:—"The prosecution of the levels east and west of the ore ground forming the Old Foxdale Mine proper has not resulted in any new discovery of this mine is an appearance more indicative of promise than I have hither from any

PENHALE WHEAL VOR MINING COMPANY.

A quarterly general meeting of shareholders was held at the offices A quarterly general meeting of shareholders was held at the omces of the company, Winchester-street, on Wednesday,
Mr. THOMAS HOLBOYD in the chair.
Mr. W. BATTYE (the secretary) read the notice convening the meeting, and the minutes of the last were approved.
A statement of accounts was submitted, which showed a debit balance of 1380l., charging up all liabilities.
The report of the agent was read, as follows:—

A statement of accounts was submitted, which showed a debit balance of 1890,, charging up all liabilities.

The report of the agent was read, as follows:—

The report of the agent was read, as follows:—

Oct. 8.—I be go present you with the following report:—At Hollingsworth's engine-shaft we have six men engaged cutting ground for cells, pole connection, the property of the restriction in the pitrowick as are demanded to the property of the standard of the property of the restriction in the pitrowick as are demanded to the property of the restriction of the pitrowick as a design process, look of the connection of the property of the restriction of the property of the prope

old during the quarter 9 tons 8 cwts. 1 qr. 22 lbs. of black tin, whice 201. 6s. 8d.—W. H. MARTIN.

sold during the quarter 9 tons 8 cwts. 1 qr. 22 lbs. of black tin, which resited 5201. 6s. 8d.—W. H. Martin.

The CHAIRMAN said the accounts, showing a balance of liabilities over assets amounting to 13801., included every existing liability: and, as far as the mine was concerned, the report just read so fully explained the whole of the details that little or nothing was left for him to add. It could not, however, fail to be satisfactory to them all to know that as its development of the whole of the details that little or nothing was left for him to add. It could not, however, fail to be satisfactory to them all to know that as its development of the property was immediately contiguous to the valuable mine of Great when the property was immediately contiguous to the valuable mine of Great when the property was immediately contiguous to the valuable mine of Great when the property was immediately contiguous to the valuable mine of Great when the property was immediately contiguous to the valuable mine of Great when the property was immediately contiguous to the valuable mine of Great when the value of the property was immediately contiguous to the valuable mine of Great when the value of ground through which they had been sluking, although unproductive was met with in Old Wheal Vor, and below which that immense deposit of the was found which was said to have realised between 2,000,000. and 3000,000. it was found which was said to have realised between 2,000,000. and 3000,000. it was found which was said to have realised between 2,000,000. and 3000,000. it was found which was all to have realised between 2,000,000. and 3000,000. it was found which was all to have realised between 2,000,000. and 3000,000. it was found which was all to have realised between 2,000,000. and 3000,000. it was found which was all to have realised between 2,000,000. and 3000,000. it was found in the property of the same two cross-courses. Which traversed Penhale Wheal Vor. When the property of the same two cross-courses which traversed The CHAIRMAN said the accounts, showing a balance of liabilities

IMPROVEMENTS IN SEPARATING SILVER FROM LEAD.

The Pattinson process is so well known in connection with the treatment of silver-lead that the description of almost any invention for effecting the separation of the silver is usually much facilitated by reference thereto, and the invention of Mr. Francisco Marquez. MILLAN, of Marseilles, forms no exception to the rule. Before the lead is conveyed to the pot, it is proposed that it shall, if requisite, be placed in a reverberatory turnace, and there submitted to a preliminary refining process, which may be conducted in the ordinary
way. The object of this preliminary refining process is to remove
by oxidation any portions of copper, antimony, arsenic, or other
matters that the lead may contain; but in some cases, where the lead
contains no other impurities than a little dross, the operation may
be dispensed with altogether. Underordinary circumstances the average duration of the process is about 12 hours. From this reverberatory furnace the lead
may be run into the Pattinson pot, which has been previously heated to preven
the lead from cooling, or facilitate its melting. The temperature of the lead is
then brought to (say) 100% Fabr., in order that the zinc to be subsequently
added to it may melt in it. Practically the temperature may be considered to
be about right when it is impossible to keep the hand at a distance of ½ feet
from the molten mest. In a reverberator, for the maximum and the dross the
from the molten mest. In a reverberator, for the lead; the dross will be again
treated, in order to extract the lead that is mixed with it mechanically. A
which undergoes a preliminary refining process. The object of this slimming
is to remove all the impurities still retained by the lead; the dross will be again
treated, in order to extract the lead that is mixed with it mechanically. A
quantity of zinc, equal to about ½ to ½ per cent. of the charge of lead in the
poet, is now introduced into the molten lead, by means of any suitable instrament, and the whole is then thoroughly and carefully stirred until the maxis well mixed. The instrument found best adapted for this purpose is a ladle, provided with a cover and a long handle, and perforated with a number of small
holes; this ladle, containing a quantity of zinc, is placed in the molten metal,
where it is allowed to remain till all the zinc has neited and passed out through
the small holes; the metal may then be stirred by means of this ladle, or ot be placed in a reverberatory furnace, and there submitted to a pre-liminary refining process, which may be conducted in the ordinary way. The object of this preliminary refining process is to remove

THE

THE

Just Published, in One Large Volume, Royal 8vo. Cloth,

ILLUSTRATED WITH EIGHTY-FOUR WOOD ENGRAVINGS, AND EIGHT FOLDING PLATES OF WORKING DRAWINGS. PRICE 31s. 6d. OF GOLD AND SILVER, METALLURGY MINING AND

BY J. ARTHUR PHILLIPS, MINING ENGINEER.

LONDON: E. and F. N. SPON, 48, Charing Cross.

Now Ready, in Crown 8vo. Cloth, with Woodcuts, 7s. 6d.,

SENTIAL ELEMENTS OF PRACTICAL MECHANICS FOR ENGINEERING STUDENTS, BASED ON THE PRINCIPLE OF WORK.

BY OLIVER BYRNE, Author or "Dual Arithmetic: a New Art." ESSENTIAL THE

LONDON: E. and F. N. SPON, 48, Charing Cross.

NEW WORK ON MECHANICAL ENGINEERING.

To be completed in Twenty-Four Monthly Parts, profusely illustrated, price 2s. each. Parts I. to IX. NOW READY.

MECHANICIAN AND CONSTRUCTOR FOR ENGINEERS, FORGING, PLANING, LINING, SLOTTING, SHAPING, TURNING, SCREW-CUTTING, &c.

BY CAMERON KNIGHT.

LONDON: E. and F. N. SPON, 48, Charing Cross.

attimony is left in the desilvered lead; in this case for removing the antimony the run-down lead must be placed in a calcining furnace and brought to a red best, or still better, some common sait is placed in the run-down lead. In place of melting down in a blast furnace one can also melt in a calcining furnace the desilvered lead, which will be alloyed with zinc, and then remove the zinc still remaining in the lead by green wood; also without a blast furnace or calcining furnace, merely by keeping the lead heated for some hours with wood, the whole of he sinc will be removed; the blast-furnace process is, however, to be preferred. By the use of green wood; steam can also be employed.

The alloy of lead, zinc, and eilver is likewise run down in a small blast-furnace with siliceous slag, only in this case the slag must contain about 36 per cent. of siliceous earth. In the melting down no loss of silver will be found to have taken of water pressure; the rich lead obtained is then, as usual, refined in the cupel. The siliceous can be taken off by a comb or water apparatus; it also succeeds well to bring about the separation of the metals in the alloy of lead, zinc, and effect in the sum of the separation of the metals in the alloy of lead, zinc, and effect alloy too much loss of silver varieses. The desilvering of lead by zinc was first attempted by Parkes, no gain was however found in the process, because the add the lead always remained alloyed with zinc.

PREVIOUS DISCOVERIES OF TIN IN THE UNITED STATES.—Prof. folder states—A single crystal of tin was found, many years ago, by Professor Bilcheock, at Goshen, Mass. Prof. C. U. Shepard found a few minute crystals to tummington, in the same State, and Prof. W. B. Rogers detected its presence in the gold-bearing slates of Virginia. Dr. Jackson, in 1849, at Jackson, N.H., gleotered three or four small veins, which, though mined upon, yielded no economical results. Prof. Whitney has described a locality of tin in the Temescal range of California, which is of no economical value. The discovery, therefore, an extensive system of staniferous veins in Missouri under conditions which careterise like deposits in Cornwall, Zinnwald, and Altenberg, is certainly an exact in American mineralogy, and it is to be hoped will lead to economical regist. The particulars of this discovery were given in a letter from a Corregion of the Mining Journal of Aug. 17.] The annual imports of tin, and shall simported from Great Britain. If this demand could be supplied from he groduct of our own mines, it would contribute essentially to the national ministry.—American Journal of Mining.

Gold Mining. In Victoria,—The returns for the first six months of the present year show exports of Victorian gold amounting to 779,210 oss.; of the present year show exports of Victorian gold amounting to 779,210 oss.; of the allow for the banks holding 48,798 ozs. less on the 30th of June than on the life of January we get at the nett yield of gold for the half-year, 730,412 ozs. The warrage number of persons engaged in mining last year was 73,479, and taking the gold obtained by them at 41, per oz., their individual earnings would amount the rate of the property of the state of the

inchinese. The total area of land mined on in the colony amounts to 853 square inlies, and the approximate value of the mining plant employed is 2,071,648. Over six millions steriing are invested in mining enterprises in the colony.

COPPER IN NATAL.—By far the most important mineralogical discrety yet made in this colony is that which has come to light during the prest week. Hitherto the discoveries of copper have been out of the colony and stone distance from our port. Griqualand, on the south, and Zululand, on the path, were the nearest localities where mineral wealth was known substantially texts. It may be remembered that the mines in the first of these places owed their discovery to the rude green paint used by the natives for decorating their hose. The stention of Mr. Shepstone, Secretary for Native Affairs, was attacted by this circumstance to a similar incident, noticed by him 18 years ago within the boundaries of Natal. In course of time he succeeded in identifying iterate locality, and Mr. Warne, a practical miner of 30 years' experienc, has intrinsically a substantial properties, and the substantial properties and the substantial properties, and the substantial properties and the substantial properties and the substantial properties and the subst

sa, by the way, that an outerop of coal shale has been observed near the flovo.

Solai Mercury, Aug. 10.

Mineral Wealth of Japan.—Mr. Gower, the British Consul at Bloodad, refers in his report of this year to the minerals which abound in the stand of Yese, and states that he has visited some of the rich mines which have been abandoned through mere ignorance of the first engineering principles, and of Yese, and states that he has visited some of the rich mines which have been abandoned through mere ignorance of the first engineering principles, and though disregard for economy of time and labour. Near Ono, a village limite from Hakodadi, there is a good lead mine, situated in a valley well supplied with the consensary wood for arming the galieries, and plenty of water to the way over 3 ft. wide. Further on some 40 miles, in the neighbourhood flood was over 3 ft. wide. Further on some 40 miles, in the neighbourhood flood, and in almost as favourable a position, there is another neglected lead off, which contains about 2½ per cent. of silver; but here also the veins have sen followed from the surface, where they are comparatively thin, instead of macetting them lower down with well directed galieries, and thus meeting has leaded. Copper and fron are found in different forms. On the east coast the familiar sense over miles and miles of iron-sand, which is said to contain over eye one, or pure metal. Gold is found in small quantities in the vicinity of high the same over miles and miles of iron-sand, which is said to contain over eyer one, of pure metal. Gold is found in small quantities in the vicinity of high the same over miles and miles of iron-sand, which is said to contain over eyer one, of pure metal. Gold is found in small quantities in the vicinity of high themselves freely to coal, which the Japanses leave was exact east the interest of a native officer, cliffs of pure coal form part of the east coast near the present of a native officer, cliffs of pure coal form part of the east coast near fact of a nati

silve

nrnace: ut 33 per ole, fron ; these, tain the

be easily fal that the runthe runthe runthe free blamuth.
trace of

LONDON GENERAL OMNIBUS COMPANY,—The traffic receipts for

ROLLOWAY'S PILLS—COUNSEL AND COMFORT.—A disorder MOLLOWAY'S PILLS—COUNSEL AND COMFORT.—A disordered make throws the whole system out of gear, and renders us unfitted both for ext and amusement. A few doses of these strengthening and purifying pills, the according to their accompanying directions, will, however, speedily restore the strength of the s MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

[EXTRACTS FROM OUR CORRESPONDENCE.]

WHEAL EMILY,—It is gratifying to find that steps are being taken to procure a powerful engine to rework that well-known property near Callington, Cornwall, which has produced such large quantities of silver gossan of very high percentage, and possesses all the elements necessary to secure the adventurers success in their undertaking.

PENHALE WHEAL VOR.—As will be seen by the details of the general meeting of shareholders (which appear in another column), it has been determined to develope this mine to a greater depth. Large quantities of ore were raised from the upper levels, and the most confident opinions are expressed that, like its neighbour, Great Wheal Vor, which is in the same channel of ground, profitably productive results will be realised in depth.

TAMAR VALLEY SILVER-LEAD MINE.—Good progress is being made in the sinking of the shaft. The indications are most satisfactory, and the ground is everything a miner could wish to see.

WEST GREAT WORK is opening out one of the richest tin mines in the Great Wheal Vor district. It is now leaving a small monthly profit, and is expected ere long to enter the Dividend List.

NORTH WHEAL CHIVERTON.—During the last few days a winze has been commenced sinking below the 80, west of Mew's shaft, which has greatly improved, and now worth about 10 cwt. of rich silver-lead ore perfathom, r, say, 12t. to 13t. perfathom. This clearly shows the greater the mine is developed in depth the richer it will become.

MINING IN CARDIGANSHRE.—Although the Bwadrain Mine, situated on the banks of the Rheidol, and parallel with Bronfloyd, was acquired but a short time since by a small party of influential capitalists, it is rapidly approaching a dividend-paying state. Nearly all the machinery has been creeted, and the dressing-floors are almost completed. Dressing operations have commenced, and it is believed that the first sale, of 40 tons of ore, will take place in the course of the present month, and that thenceforward the sales will be monthl

MINING AND ITS PROSI M. Peter Watson's "Weekly Mining Circular and Share List N. No. 445, Vol. IX):—"There has been throughout the week an alternating peter in reference to the continental questions that are absorbing so much attention, and, therefore, there has been a corresponding amount of fluctuation in the quotations of leading securities, more especially in foreign bonds. The market value of mine shares, however, is never adversely affected by such causes; on the contrary, it often happens that during periods like the pretent a marked improvement sets in, which, probably, is to be agrounted for by the fact that that portion of the investing public who choose foreign bonds as their channel of investment transfer their attention to dividend and bona fide progressive mines, which results show are, after all, not nearly so speculative, while the profits realised, either by an advance in market value, or on the receipt of periodical bi-monthly or quarterly dividends, are oftentimes considerably greater than can be possibly realised by any foreign bonds, although purchased at the minimum price. During the whole of the past week I have been engaged in visiting the leading Cornish mines, and the information thus obtained will, I doubt not, prove as advantageous to my customers as it will afford me pleasure and satisfaction in communicating it."

[ADVERTISEMENT].

From Mr. R. EMERSON.—For some time past I have recommended West St. Ives, and a look at the reports, and the actual condition of the mine, bears out my most sanguine expectations. The account that was sent for insertion in the Journal last week did not appear, but the information was not of an important character. The change of ground which had seemingly affected the lode unfavourably for a time, has tended, as I fully expected, but to improve the condition of matters, for the information shortly followed on a similar change some time since was most favourable, as in this instance. West 5t. Ives will be a great mine, and the buyers now coming forward confirm this conviction. The present low price for BUDNICK CONSOLS shares is attracting the attention of capitalists. I recommend my friends to purchase without delay. A great rise in the price is evident.

RATING BLAST-FURNACES "OUT OF BLAST."—The opinion of Mr. Glen, barriater, has been taken as to whether furnaces "out of blast" are rateable to the poor. He affirms the rateability as a store place, and remarks that if such a property were to be entirely abandoned as a blast-furnace, and all the necessary machinery and material removed from the premises, the case would be like that of an empty house in the intervals of letting, and would not be rateable; but when the fires are merely blown out, and the property is so far disused as a blast-furnace, it is still occupied as a store place for machinery or material, and as suce is, in his opinion, rateable according to its annual value as a store place merely. It appears to him to be impossible to distinguish a blast-furnace out of blast with the machinery or materials on the premises, from the case of a closed mill in which machinery is left, as in Staley v. Castleton, and Harter v. Salford. It is, like the closed mill, kept up for the purpose of keeping the machinery together, and the question in both cases is precisely the same—what he premises would let for to a hypothetical tenant, "who had the capacity to make such a use of them as could be made by a tenant. As regards a furnace "out of blast" in order that repairs may be done, he is of opinion that it is liable to be rated precisely as if it were in full work. In such a case, the rent which a hypothetical tenant would have to pay would not be lessened because he stopped working the furnace whilst the repairs were being executed; and there is no distinction between this description of property and any other manufactory or shop which is closed temporarily whilst repairs are being executed. RATING BLAST-FURNACES "OUT OF BLAST."—The opinion of Mr.

shop which is closed temporarily whilst repairs are being executed.

COMPANIES NOT COMMENCING BUSINESS WITHIN A YEAR,—In rete the Metropolitan Railway Warehousing Company (Limited), the Lords Justices reversed the decision of the Master of the Rolls. The company had been formed for the purpose of building warehouses over an intended station of the Metropolitan Railway Company. Delay having taken place in the acquisition by that company of the land required for the station, the Warehousing Company did not within a year from the time of its incorporation commence its business. A shareholder presented a petition to wind-up the company, and the Master of the Rolls made a winding-up order. The Court of Appeal, being of opinion that the delay was satisfactorily explained, and having regard to the objects for which the company was formed, discharged the order of the Master of the Rolls.

VARIANCE BETWEEN PROSPECTUSES AND ARTICLES OF ASSOCIA-VARIANCE BETWEEN PROSPECTUSES AND ARTICLES OF ASSOCIATION.—Lord Justice Cairus recently affirmed the decision of the Master of the Rolls, in re Barned's Banking Company (Limited), holding that a person who applies for shares in a company formed under the Act of 1862 is, if Articles of Association are in existence, bound to inform himself of their contents before he makes his application. But even if those documents are not then in existence, he is bound to satisfy himself as to their contents at the very latest when he receives his allotment of shares. If he does not do so he is bound by the contents of the Memorandum and Articles, and cannot afterwards be heard to say that they differed from the statements of the prospectus on the faith of which he applied for his shares.

piled for his shares.

"JUST AND EQUITABLE" WINDING-UP,—The cases in which the Court of Chancery will, under section 79, clause 5, of the Companies Act, 1862, make an order to wind-up a company, because the Court is of opinion that it is "just and equitable" to do so, must be cases ejusdem generis with those mentioned in the former clauses of the same section—4.e., cases where there is something in dicating insolvency of the company, or incapacity of the company for some other reason to carry on its business. Where something of this kind does not exist, the Court will not, against the wishes of the majority of the shareholders, make an order to wind-up a company, unless it has become absolutely impossible to carry on the business. Lord Justice Cairns thus held (on reversing a decision of Vice-Chancellor Malins) in the Suburban Hotel Company (Limited).

Chancellor Malins) in the Suburban Hotel Company (Limited).

THE PANALOTON ENGINE,—An improved engine has been invented by Mr. J. B. Page, of New York, to which this name has been given, the novelty of the invention consisting in the means employed to convert a reciprocating motion into a rotary motion. The inventor believes that a uniform leverage—that is, a constant exertion of an equal amount of power at all points of the stroke—is better than the variable leverage of the crank, and that he has succeeded in developing a larger amount of power from a cylinder of a certain diameter with his improvement, than is possible with the crank. He has experimented for years, and is satisfied he has greatly added to the power of the ordinary engine. Its principal parts are a movable or sliding double tooched rack, in combination with a segmental opinion and rotating cam. The rack-frame, has secured to it at one end the piston rod of the cylinder, and slides in the ways. As the piston is sent forward and back, of course the rack mores with it. Engaging with the rack, alternately at top and bottom, is the segment of a pinion, secured to the main shaft, on which is the fly-wheel. Secured to the pinion is a cam, which as either end of the frame approaches the centre, or the main shaft, comes in contact with curved pieces, at the extremities of the rack-frame that, comes in contact with curved pieces, at the extremities of the rack-frame that, comes in contact with curved pieces, at the extremities of the rack-frame. The cylinder and steam chest are precisely like those of an ordinary engine, the other parts constituting the main differences. When the piston is moved

by the force of steam in either direction, it carries with it the rack-frame, and the rack, engaging with the segmental pinion, compels the shaft to make half a revolution. Part of this half revolution, however, is made by the momentum of the balance wheel, as the pinion is toothed only about two-fitths of its circumference. As the rack reaches the end of the stroke the cam rolls against the curved guides, and assists in throwing the rack in the other direction.

BLACKBAND-PENNSYLVANIA, U.S.

The development of blackband is still progressing, and new local

BLACKBAND—PENNSYLVANIA, U.S.

The development of blackband is still progressing, and new loca lities are opening to demonstrate its general existence as a bed. The ore at the original place of discovery in the McGinnes shaft is in very fine condition and in good and regular order. The "fault" recently encountered was too small and insignificant to deserve that title, and in a large and properly opened mine it would not have interfered with the production, or obtained particular notice. At the east slope the bed is also in black ore, and in good condition; while other openings to the east look favorable. We are able to make an emphatic assertion that the blackband is a regular bed, and properly of the most sceptical on this point. The Belmont Coal Mining Company's property, consisting of about 1000 acres, has recently been sold to a weathy New York Company, who will at once proceed to developed the property for blackband, and erect furnaces in due time. Those who use the blackband ore—the demand for which is greater than the present supply—tate that the Iron made from it will render the importation of Scotch pig entirely unnecessary. Recently we had the pleasure of vibiling and examining the vireus blackband to whom we are indebted for much interesting information. The striking similarity of the ores taken out at the different openings, is of itself sufficient to convince the most sceptical of the great extent of the vein of ore. Nothing but the difficulty of procuring profitable leases from the landowners has prevented the extensive development of theore in several places. At the McGinnes shaft, since the fault was passed, the vein is 20 in, thick, and of good quality. Close to this pany would either vigoronaly prosecute the work of mining on their own account of the good opportunity here afforded of obtaining an immense amount of one while most sception of the sond provided the vision of the sond provided the vision of blackband, at a point near the road to the slope of the lill ad state of 30 or 40 yards. The

onnerty what it ought to be—the great mineral-producing region of the world.
—Pennsylvania Standard.

THE METEOR-COMETIC THEORY (METEORS).—Mr. H. J. Church, of Colchester, writes—"A letter which I have just received, contains the rather puzzling query—"Do you think that there are such hard metallic substances in meteors as to forge a sword blade?" The following answer seems to suggest itself. There is a general tradition among the Tartars that the Siberian iron formerly fell from the heavens. We have a tolerably authentic testimony of a like fall in India. The Right Hon. C. Greville, in a communication to the Royal Society (Phit. Trans., 1803, Part I.), gives a very interesting paper, translated from the Emperor Jehangire's Memoirs of his own reign. The Prince relates that in 1820 a violent explosion was heard at a village in the Punjaub, and at the same time a luminous body fell through the air on the earth; that the officer of the district immediately repaired to the spot, and having found the place to be not he caused it to be dug, and they reached a lump of iron violently hot; that this was sent to court, where the Emperor ordered it to be forged into a sabre, a knife, and a dagger; that, after trial, the workmen reported it was not malleable, but shivered under the hammer; and that it required to be mixed with one-third part of common iron, after which, the mass was found to make excellent blades. The royal historian adds, that on the incident of this iron of lightning being manufactured a poot presented him with a distich that—"During his reign the earth attained order and regularity; that rawiron fell from lightning being manufactured a poot presented him with a distich that—"During his reign the earth attained order and regularity; that rawiron fell from lightning being manufactured a poot presented him with a distich that—"During his reign the earth attained order and regularity; that rawiron fell from lightning with the meteorie stones analysed by Howari and Vauquelli. Under those circumstances to mak monless with the historic notice we have concerning such a process. To return to the general character of meteors. Perhaps the most remarkable meteor of modern times is that which was seen all over England on March 19, 1818-19. It was first observed at 8-15 about the Pielades, when it moved after the manner of a falling star. The meteor in its way turned pear fashioned. Its colour was whitish, with an eye of blue of most vivid dazzling lustre, which seemed in brightness very nearly to resemble, if not surpass, that of the body of the sun on a clear day. Its height in a perpendicular line was computed to be 69 English miles from the earth's surface. It was about half a minute in passing from its first explosion to its last extinction, and it is said to have travelled at the rate of 300 geographical miles per minute. Some people imagine that they felt the warmth of its basms, others thought they were scalded by it. All accounts agree that there was heard the report of a very great cannou, which was soon followed by a ratifling noise like firearms; this was attended by an uncommon tremor in the air, windows and doors in houses being sensibly shaken. Comets never come and go in this fashion; nor can we imagine the possibility of their substance or nucleus being forged into sword blades—therefore, it may be fairly concluded that the periodical shooting stars are quite distinct in their nature, effects, and orbits from comets. From various writers we collect that ordinary meteors appear—1, in every climate; 2, at every season of the year; 3, at every period of the day; 4, they appear for the most part when the sky is serone; 5, comets are never visible when the sky is cloudy, but meteors being sometimes below the cloud region are visible; 6, they proceed from, as well as towards, all points of the compass; 7, many of them in their course throw up sparks, and divide themselves into soveral, sometimes larger, sometimes smaller, parts before they entirely disappear—not so with comets; 8, this bursting into pieces is gen

Mining Correspondence.

BRITISH MINES.

BLACK CRAIG CONSOLS.—John Smitham, Oct. 10: Harrieti's shaft, sinking below the 64, is still hard for sinking. We have the 54, east of shaft, on Harrieti's cross-out, on the north lode, is still producing good stones of blende. The stope in the back of the 54, west of Harrieti's cross-out, is producing good stones of blende. The stope in the back of the 54, west of Harrieti's cross-out, is producing from 15 to 20 cwts. of lead per fm., and the western stope is producing about 10 cwts. of lead per fathom, but I know those stopes will improve for lead as we get up, for we have a cross-out driven south in the 6 fathom level, 15 feet above this stope, through a lode that will produce 30 cwts. of lead per fathom. I will put some of our men next week to sink a whuse in the bottom of this cross-out, and get this piece of ground holed to the stopes below. We shall send off the 30 tons of lead ore, sold to Messrs, Walker, Parker, and Co., at 121. 6s. 6d. per ton, on Monday next.

BOTTLE HILL.—J. Eddy. Oct. 10: We have driven east on the course of this

Monday next.

BOTTLE HILL.—J. Eddy, Oct. 10: We have driven east on the course of this lode about 3 fms.; the lode now in the end is about 18 in. wide, carrying tin, but not to value.—South Lode: The lode in the end, east of the 24 cross-out, is about 2 ft. wide, carrying tin, but not saving work; the ground is still favourable for driving. The samples are sent off to the different smelters; quantity

but not to value,—South Lode: The lode in the end, east of the 24 cross-cut, is about 2 ft. wide, carrying tin, but not saving work; the ground is still favourable for driving. The samples are sent off to the different smelters; quantity about 4 tons.

BRADDA (ISLE OP MAN).—B. Rowe, Oct. 5: On Saturday last I made a careful inspection of the Bradda Mine, and beg to hand you the following report, which will be found confirmatory of those you have lately received from Capt. Barkell I first examined the 15 and 27 fm. levels, where I found, as expected, considerable workings, which from time to time must have produced a great deal of ore. The lode, or rather two lodes here, side by side, are very large, and it is probable contain much good ore ground, even at these levels, as yet unexplored. On the east lode there is a stope working in the roof of the 15, which has and is still yielding some excellent copper and lead ores, and is likely to lead to the discovery of much more valuable ore ground. This lode, in all respects so far, I like best, and as in the present workings its full size and what it contains have never been proved, and as I look especially to it, from present appearances, for the most important discoveries, I have recommended that this should be done. At the 40, or present bottom level of the mine, the workings have consisted in dirtying north and south on the western or Bulwark lode, and northwards on the east lode; so far, upon the former no discovery has been made, but on the latter or east lode the operations have been more successful. The full size of the lode here also has not been ascertained, but the part on which the level is being carried has now for some fathoms, and for the entire width of the level, yielded some very rich copper ore, and has a most encouraging appearance. The ore consist of green carbonate, black oxide, and yellow sulphuret of copper, all interspersed through a large amount of gossan, and those are conditions attendant generally only on the best and most eminent of our c

othe company's sett, which it is confidently expected will result in new and extensive discoveries, and thus give to Bradda by other mines on the Island, and other facilities similar to those price of the control of

but in consequence of having so much water we are obliged to suspend further sinking until the lode is drained from the level below. The lode in the stopes in the back of the 100 fathom level is without alteration, still the same size and value as last reported. In the 85 fm. level cross-cut north we have cut into the south part of the lode of ft., which is composed of quartz, capel, and iron, and as far as seen is poor for tin.

CWM ERFIN.—Oct. 8: The lode in the stope over the back of the 10 is 3 feet wide, and worth 1½ ton of lead ore per fathom. No improvement has yottaken place in the deep adit level, east of the boundary; the lode is still very small, and of no value. A short stope has been set in the back of this level, about of fathoms east of the boundary, where the lode is 2½ feet wide, and worth about 5 cwts. of lead ore per fathom. This stope is going up into whole ground to the surface, and there are 100 fathoms of backs over the same. We have three other stopes working in the back of this level, producing, on an average, 1½ ton of lead ore per fathom. The lode in Taylor's drift, east of the boundary, continues to be small and poor. The lode in the stope over the back of this level, 25 continues to be small and poor. The lode in the stope over the back of this level, 25 continues to be small and poor. The lode in the stope over the back of Williams's level is 4 feet wide, and worth 15 cwts. of lead ore per fathom. We have 12 men employed in the different stopes over the back of ditto, yielding, on an average, 15 cwts. of lead ore por fm. The lode in the stope over the back of Williams's level is 4 feet wide, and worth 15 cwts. of lead ore per fathom. We have two men still costeaning the back on Mr. Jones's ground, but up to the present nothing has been met with of any value.

DALE.—R. Niness, oct. 7: The driving of the 44 fm. level cross-cut west, and the level south, is being pushed on as fast as possible; it is in every way the same as when Mr. Ward saw it on Friday last.

DEVON AND CORNWALL UNIT

ceedingly hard in the lotteness, the copper ground, which I trust will prove of some value.

EAST NEPTUNE.—Matthew Francis, Oct. 9: I am pleased to hand you a brief notice of this mine. I shall forward a full report, with plans and sections, next week. I am just up from underground, where I have seen, I think, the finest copper lode, certainly one of the finest I ever saw in any rock, that has come under my notice. The main lode is upwards of 12 ft. wide, attended by side lodes and branches rich in metallic indications. In the 15 fm. level, at the top of the footway winze, the splendid gossans, prians, and carbonates of copper seen above have settled into masses of highly-productive grey copper ore, yielding from 6 to 7 cwts. to the cubic fathom of ore that will assay, I should think, from 30 to 40 per cent. for copper. This would give the value of the lode at from 10t. to 12t, per cubic fathom, a most favourable yield so near the surface—not more than 15 fms, from grass, and one that affords a prospect of great riches below. I see from the statistics of Old Neptune, on the same lode to the west-ward, that the inciplent or opening sales were about 1000t, per month. May 9, 1811, I find that 54 tons were sold at 19t, 13s. per ton, amounting to 1061t. 2s.; July 11, 63 tons, at 17t. 5s., 1086t, 15s.; Aug. 15, 63 tons, at 24t. 3s., 1497t. 6s.; thus in three months giving 4128t, 3s., of which, I have no doubt, I may put down fully 2000t. as profit. You are now on the top of the corresponding stages of depth from which these were derived, and I seriously anticipate that a similar account will be made from your mine.

nn three months giving dizzi. 3s., of which, I have no doubt, I may put down nully 2000.1. as profit. You are now on the top of the corresponding stages of depth from which these were derived, and I seriously anticipate that a similar account will be made from your mine.

EAST ROVIDENCE.—I, Nancarrow, W. White, Oct. 5: At our usual survey to-day the following work was set.—The 10st to drive east by sk men and three boys, at 12i. per fathom; lode simproving in appearance. The 3s, to drive north under the Carbona, by four men, at 4i. 15s. per fathom. To sink on the Carbona below the 70 by six men, at 3i. per fathom; lode of 1 ft. wide, worth 7i. per fathom, and extending east and west. The 50 to drive east by two men, at 6i. per fathom; opening up bribate ground. We have the cast by two men, at 6i. per fathom; opening up bribate ground. We have the cast by two men, at 6i. per fathom; opening up bribate ground. We have the cast by two men, at 6i. per fathom; opening up bribate ground. We have the cast by two men, at 6i. per fathom; opening up bribate ground. We have the cast by two men, at 6i. per fathom; opening up bribate ground. We have the cast by two men, at 6i. per fathom; opening up bribate ground. We have the cast by two men, at 6i. per fathom; opening up bribate ground. We have the cast by two men, at 6i. per fathom; opening up bribate ground. We have the cast by two men, at 6i. per fathom; opening up bribate ground. We have the cast by two men, at 6i. per fathom; opening up bribate ground. We have the cast by two men, at 6i. per fathom in which, producing stones of copper ore, but not enough to value, but in bottom of the shaft it is 18 in. wide, worth 7i. per fan, which was a shaft to a late level, divide by the 10s, which will take about on fathom the wild by the shaft of this level, which which were the love of the cover, of the shaft be level up the cover of the shaft below the 10s, which will take about on fath and the fathom wild, worth 6i. per fathom. The strength of the shaft by the shaft, as bee

records recommend a wines to size from the shallow give down to the 30 cm are shown gives and should these importances of the size of the

88 cross-cut north; it is strongly mineralised with small branches of gossan, &c

che tribute pitches, on the willob, are locking a little better. The meanings, secondiment to work well.

On the base of the second will be a second be a second will be a secon

HINGSTON DOWN CONSOLS.—T. Richards, Oct. 9: The 140, east of Balley's engine-shaft, is worth 351, per fm. The stope in bottom of the 130 east, and east of the cross-course, is worth 351, per fm.; the stope in bottom of the 130, west of the cross-course, are worth 351, per fm.; the stope in the back of the 150 east is worth 351 by per fm. The stope in the back of the 150 east is worth 181, per fm.; the stope in the back of the 120 east is worth 181, per fm.; the stope in the back of the 120 east is worth 181, per fm.; the stope in the back of the 120 east is worth 181, per fm.; the stope in the back of the 120 east is worth 181, per fm.; the stope in the back of the 120 east is worth 181, per fm.; the stope in the same as last sworth 181 ittle lead, but not enough to value; the ground is very promising for an improvement. The pitch in the back of this level is the same as last reported, worth 8 ewts, of lead per fathom.—Brabner's Shaft: The lode in the pitch in the bottom of the 80 south is worth 10 ewts. of lead per fm...—Roundary Shaft: The lode in the 50 north is worth 10 ewts. of

level is the same as last reported, worth s cwts, of lead per fathom.—Braber's Shaft: The lode in the pitch in the bottom of the 80 south is worth 10 cwts. of lead per fm.—Boundary Shaft: The lode in the 50 north is worth 10 cwts. of lead per fm.—Boundary Shaft: The lode in the 50 north is worth 10 cwts. of lead per fm.; the pitch south is also worth 10 cwts. of lead per fm.—Show Shaft: The lode in the 40 yard level south, on caunter lode, is worth 15 cwts. of lead per fm.—Williams's Shaft: The lode in the 40 yard level south, on caunter lode, is worth 15 cwts. of lead per fm.—Williams's Shaft: The lode in the 40 yard level south, on caunter lode, is worth 15 cwts. of lead per fm.—Williams's Shaft: The lode in the 40 yard level south, on caunter lode, is worth 15 cwts. of lead per fm.—Williams's Shaft: The shaft level south as good atones of lead, and is very promising. All other points without change.

NETHER HEARTH.—W. Vlopad, Oct. 7: We have got the old drift cleared out a few fathoms west of the old shaft, and shall now begin stoping again. There is no change to notice in the small vein. There will be room here for two more men in about a week. The ore has not gone away yet.

NEW CROW HILL.—Wm. Trelease, Oct. 8: The 70, east of engine-shaft, is being pushed on with all possible dispatch; the meu employed here are keeping the time going from Monday morning one o'clock till nine Saturday night, in order to get the end home to the winze with as little delay as possible. I suppose it will take over two months more to effect a communication here, although I intend as soon as the new winze is down to dial the ground, and put the winzemen to drive against the end men. The lode in the winze is atlli large, and poor for ore. The lode in the old stope (No. 1) has fallen off considerably since last week, and at this moment produces only occasional stones of lead. The new stope, however (No. 2), has further improved, and will produce now in places at the rate of 10c wts. per fathom.—Wheal Loulsa: Both the bottom ends a

e carrying out of the new work is that which will have my greatest attern being that portion of our operations which we look forward to with greatest

WHEAL TOWAN.—Richard Pryor, Oct. 9: The lode in the adit level west, is much larger, and composed principally of mundic, intermixed

WHEAL TOWAN.—Richard Pryor, Oct. 9: The lode in the adit level, adving west, is much larger, and composed principally of mundic, intermixed with copper ore, and likely to further improve.

NOTH DOWNS.—John Grenfell, Oct. 10: The stope in back of the 60, west of rise, fms. below the 50, and is highly important, as the ore is going forth in about 5 direction of, and is likely to unite with, the ore driven over in that (the 50) level. No lode has been taken down in the 50 west, neither is there any change level.

No lode has been taken down in the 50 west, neither is there any change level. No lode has been taken down in the 50 west, neither is there any change level.

1614. 5s. 6d.

RTH HETALLACK.—G. R. Odgers, Oct. 5: Setting Report: The No. 1 alary shaft to sink below the 10 by nine men, at 44. 15s. per fathom, the men of the horse hire. The lode is 18 in. wide, and producing good silver-lead, the change that has taken place in the ground as we go down, and in the cier of the lode, I shall be disappointed if we do not meet with a good lode in gr. The adit north by three men, at 25s. per fathom; the lode is 18 inches of reason.

om the change that has a last and sappointed if we do not meet with a good loue is king. The adit north by three men, at 25s, per fathom; the lode is 18 inches die, of goessan, &c.

SORTH RETALLACK.—G. R. Odgers, J. Harris, Oct. 9: The lode in No. 1 andary shaft, sinking below the 10, is 18 in. wide, and producing good silversi, embedded in beautiful strata for making a deposit of lead, worth at prent about 4 ewts. of lead to the fathom, and improving. The lode in the adit rith, on No. 2 lode, is 18 in. wide, of gossan and quartz. We are busy making dressing-floor, that we may dress a parcel of lead. We think that the process on this lode for a bunch of lead are very encouraging indeed.

NORTH SHEPHEEDS.—Henry Bennetts, Oct. 10: In the 50, west of enginesaft, I have never seen the lode look so promising as it does to-day; the lode 2ft. wide, composed of mundic and fine lead; and if the lode continues we ortly expect an improvement. In the 20 cross-cut we are daily cutting small rankes dipping towards the lode, which we believe to be feeders of the lode. So ground is spare for driving, but I believe the lode is not far distant. OLD GUNNISIAKE.—H. Rickard, Oct. 5: We have holed the 48, east from where shaft, with the deep adit level, by means of a bore-hole, which of late abave kept in advance of the end for safety, having about 4 fect more to drive shard at present. The water at Michael's shaft is in fork 6 feet below the 61, and a hope to reach the 61 about Friday evening, if all things go right. We are learning and securing the 21 west below the deep adit, which is 36 fathoms from grace. In the present end the lode is about 18 inches big, producing some good rock for grey copper ore, with a very kindly appearance. The engine is working in well at present.—F. Evans, Oct. 9: No particular change has taken other and the contract when a securing the 21 west below the deep adit, which is letting out more

at present. WESTMINSTER.-F. Evans, Oct. 9: No particular change has taken

well at present.

Lip WESTMINSTER.—F. Evans, Oct. 9: No particular change has taken to the mine since my last, except the 92 cast, which is letting out more of; the lode continues exceedingly promising, with lead ore scattered through we are getting out the water from the ore trenches in the bottom of the 65, the object to sink a winze in the bottom level cast, and to cut out the ore ind now being opened by that level as well as for ventilation. I shall be to say more about this in my next, but I may add I have a good opinion of ground turning out well for lead ore.

Al CONSOLS.—F. Puckey, J. Hosking, Oct. 7: Treffry's North Lode: The in the 70 end, driving west of Treffry's north shaft, is at present disordered, poor for copper. The lode in the rise in the back of the same level, behind end, is 2 feet wide, and worth 71. per fathom. In the western stope, in the of the 70, the lode is 2½ feet wide, worth 161, per fathom. In the castern bottom of the 80, west of the winze, is 2½ feet wide, worth 81, per fathom ground in the 60 cross-cut south is favourable for progress; present price driving 41, 15s, per fathom. In the 60 small and unproductive.—West's Lode: In the 30, from Treffry's shaft, the lode is 2 ft, wide, and worth for copper and blende 71, per fathom. In the rise in the back of the 20 cast the north part of the is producing good stones of copper ore. In driving the 20 (middle level) furwest the lode the lode has improved, and is now 2 feet wide, of a very prong charactor, composed of quartz, peach, mundle, and copper, worth for the 15A. Per fathom.

se driving 4d. 18a, per fathom. In the 60 end, driving west from this cross-cut, each count rectify; shaft, the lode is 2f, wide, and worth for copper and blende end from the first shaft, the lode is 2f, wide, and worth for copper and blende end from the first shaft, the lode is 2f, wide, and worth for copper and blende end from the first shaft s

of s's of elds e. red ain. two

t, is oing o, in sup-ugh

last new es at end, eh is

aible

100l. worth of tin ore. Whilst confining ourselves to these amounts as our estimate, we are induced to hope from the promising character of the lode in the 51 west, and the winze sinking under the 40, that we may make discoveries, which will enable us to make our returns much better.

BOUTH HERODSFOOT.—Wm. Goldsworthy, Oct. 9: In the 86 south the ground is a little easier for driving, but the lode is still small, driving by four men, at 4l. 10s. per fm., stent 2 fms.; in this level north we have cut another large slide, but we hope to meet with the lode again shortly; driving by six men, at 4l. 5s. per fm., stent 3 fms.

ground is a little easier for driving, but the lode is still small, driving by four mon, at 44. 10s. per fin., stent 2 fins. : in this level north we have cut another large silde, but we hope to meet with the lode again shortly; driving by six men, at 41. 5s. per fin. at 64. 5s. per fin. at 65. per fin. a

at d. per fm. . It the To week the lode produces tinstuff of low quality, and price of triven at 10 lb, per fm. . The tob south, at 111, per fm., the lode is worth st. per fm. the lode is morth producing of west. per fm. the lode is morth, producing at even. I lode to be fm. at 21. is, per fm.; per fm. the lode is morth, producing at even. of lead per fm. we have three stope in back of this level, set as flows. The lode is the l

ore—a kindly lode. In sinking Richards's shaft under the 15 the ground is good killas and shaft dry. The stope in back of the 86 will produce 4 tons of ore per fan. There are five stopes in the back of the 75, producing on an average 3½ tons of ore per fathom.

WEST WHEAL TREMAYNE.—S. Roberts, Oct. 8: I have great pleasure in reporting a still further improvement in the 20 end west; the lode is 16 inches wide, of a most kindly nature, producing very rich yellow and black ore, but from its conglomerate mixture of mandic and lead I cannot estimate its value incly until we have made some assays. I judge we may safely say it is worth 21, per fathom. The cross-cuts are progressing favourably, but require some timber. At present we have four tribute pitches working, two in the back and one in the bottom of the 10 fm. level, and one in the bottom of the adit, on the south lode.

WHEAL AGAR.—E. Rogers, Oct. 9: We are making fair progress in sinking the whim-shaft, and the flat-rods, pitwork, &c., are working exceedingly well. There is no change in any place in operation worthy of remark, except in the 150 end, east of whim-shaft, where the lode is increasing in size, boing now 4½ ft. wide, about the same quality stuff as last reported.

WHEAL BULLER.—J. Inch. J. Brown, Oct. 9: Stevens's Shaft: The 92 east, on the south part of the lode, is worth for the 52 per fathom. The 92 east, on the north part, is producing tin, but not to value. The 92 west is poor. In the 80 east the lode is large and poor, and disordered by a crossing of civan. The winze sinking under this level is worth 20. per fathom. The 20 per fathom. No. 2 stope is worth 151, rer fathom. The winze west of the shaft is suspended on account of the water until the 92 gets under in order to drain it, which will take another month. The 70 east is poor. The 60 week, on the north branch, is producing good stones of copper ore.—Hocking's Shaft: The 81 east is poor. The 70 week is worth 261, per fathom. The winze weak of the shaft is suspended on account of the wat

end. In the 108 east, on the south lode, the lode is 2 ft. wide, composed of quartz and fluor-spar, and yielding saving work for dressing, but not rich. In the 96 cross-cut south the ground is still favourable for driving. In the 84 east the lode is 1½ foot wide, of a very kindly appearance, spotted with mundle and copper ore, and letting out much water. There is no change in the tribute department to notice.

ore, and letting out much water. There is no change in the tribute department to notice.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Oct. 5: Old Lode: The lode in the winze sluking below the 100, east from the engine-shaft, is 15 inches wide, composed of quartz, and a little black ore; we think when this is holed to the 110 that it will be worked on tributo. The lode in the 110 east is 15 in. wide, of much the same character as that in the winze sinking below the 100 fm. level.

—New Lode: The lode in the new shaft, sinking below the 120, is 2½ ft. wide, containing black and grey ore, with malleable copper. In the eastern end of the shaft there is a good branch of ore, and from the appearance of which and the bearing we think it is the canner; the branch in the end of the shaft is worth fully 1 ton of copper ore to the fathom, and if it continues we shall drive at the 130, which will enable us to open out orey ground. The lode in the 100 is 3½ ft. wide—a splendid bunch of tin, and worth fully 70. per fathom; in fact, it is the best lode we have ever seen in this mine. The pitches are working much the same as when last reported.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Oct. 10: The men are making good progress with the sinking of the new shaft below the 120, and the branch of ore continues in the eastern end of the shaft, and which we are confident is the caunter. As soon as we are down 10 fms., and the thing continues, we shall immediately drive east. The lode in the 100 west continues very good; in fact, it is a good bunch of tin, worth from 70, to 80, per fm., and which we have set to four men, at 4s. in 11, to drive the level 9 ft. high. The pitches, on the whole, are looking pretty well, and we believe that the men are carning fair wages. You shall have a its of the tribute pitches, with the average tribute, by next post.

we shall immediately drive east. The lode in the 100 west continues very good; in fact, it is a good bunch of tin, worth from 701. to 801, per fm., and which we have set to four men, at 4s. in 11., to drive the level 9 ft. high. The pitches, on the whole, are locking pretty well, and we believe that the mea are carning fair wages. You shall have a list of the tribute pitches, with the average tribute, by next post, and leaves. Whealt is the tribute pitches, with the average tribute, by next post of Holgate's shaft, the lode is becoming more porous, and letting out a good deal of water, which we consider good indications for an improvement; at present the end is yielding stamping-work.—New Shaft—Pryor's Lode: In this shaft, slaking below the 82, we have met with another gossan, which will slinder us from seeing he lode as early as we anticipated. The lode is much limited in the second of the second in the second of the second in the second of the second in the second i

FOREIGN MINES.

FOREIGN MINES.

PORT PHILLIP AND COLONIAL GOLD MINING COMPANY.—The directors have received the following telegram from their resident director, Mr. Bland, at Clunes—"August, 4900 tons, 8 dwts. per ton, remittance 4000."

VAL ANTIGORIA.—Thomas Roberts, Oct. 5: We have the pleasure to report that since our last the lode in the ad it level north has yielded ore, producing, on average by the mills, 1 oz. of gold per ton. The No. 2 lode, in the 10, gives ore worth about 18 dwts. of gold per ton. The lode in the 10 and 20 fm. levels ends south is at present small. In the 30 we have commenced to drive both north and south on the lode. The ore from these ends yielded 1½ oz. of gold per ton. As soon as these ends are a few more fathoms from the shaft we shall commence sinking under the 30, on the ore lately discovered. We have since last smelling obtained more amalgam than ever was obtained by us in this mine in so short a time. The remittance of the gold will be made this month. On surface we have let out on contract the building of walls for winding and crushing-machinery, and have started with great vigour getting timber and other necessaries to receive the machinery, the arrival of which from England we desire very much.

on surface we have receive the machinery, the arrival of which from England other necessaries to receive the machinery, the arrival of which from England we desire very much.

VICTOR EMANUEL.—Thomas Roberts, Oct. 4: Since our last we have intersected the auriferous lode, which carries a beautiful wall, and produces good stones of auriferous ores. We are now driving northward on this lode, with a view of getting under our surface openings to reach the intersection of this lode with the lode carrying auriferous copper pyrites. The whole driving necessary to complete this is about 60 metres.—Baveno Mine: By the end of this month we shall have ready for shipment another parcel of 10 tons of copper or estimated to produce about 13 per cent. of copper

PESTARENA.—T. Vaughan, W. Roberts, J. Mitchell, Oct. 5: We are happy to inform you that our gold remittance, which will leave the day after to-morrow, will again be over 1000 ozs., obtained from amalgam produced since Ang. 27. You will receive the telegram giving the exact number of ounces in time for your meeting of the 9th.—Pestarena: Since our last we have at the adit level reached a side, lode by a cross-cut northward from the main lode; this new lode is, as far as seen, 2 feet wide, and the ore coming from it gives to the native mills 1 oz. of gold per ton. An improvement has taken place in the 33 north, on No. 4 side lode; the lode in this end jelds at ons of ore per fm., yielding 1½ oz. of gold per ton. An other improvement has taken place in the 33 north, on No. 4 side lode; the lode in this end jelds at ons of ore per fm., the ore being of a richer quality than ever before met with in this end. This speaks well for the unexplored ground between this and the Pozzone Mine, and we fully expect yet further improvements in this direction. The stopes being worked on these side lodes are yielding their usual quantity of ore. The leading courses of ore in the bottom stopes, on No. 1 lode, continue to be worth in gold 100% per fathom, and the average of the whole stope No. 2 stope, in the back of the same level, is 6 ft. wide, average orc. The lode in No. 1 stope, in the back of the same level, is 6 ft. wide, average orc. The lode in No. 1 stope, in the back of Cava Vecebia level, is 2 ft. wide, worth 1 oz. of gold per ton. We are now engaged at surface in covering the great water-wheel, to enable us to work the milis during the coming winter. Val Toppa Mine: The lode in the stopes, in the back of Fisher's level, looks well, and a large quantity of average ore is being daily broken from it. The lode in the back of Marmo Rosso level is 5 ft. wide, yielding its usual quantity of ore. We have commenced stoping in the back of a deeper level; from a trial of the ore from this point, made last week, it gives is dwts. of gold per ton. We have made good progress in laying the tramproad in this level, and shall finish it and the stopes within a very short time. At the establishment all the machinery continues to be in good working condition. The native mills at the Marmazza have, since the recent rainfall, commenced working again, and we expect, therefore, an increase of gold returns from this district over those of the last two months.

[Reports from the Alamillos, Linares, Fortuna, and Pontgibaud Mines appear in the Supplement to this week's Journal.]

CHAUDIERE GOLD MINES .-- We continue to receive the most fa-CHAUDIERE GOLD MINES.—We continue to receive the most favourable reports from these mines. Some idea of their richness may be conceived from the fact that a party of five men, working in a hole or pit 14 ft. by 6, sunk on lot 15 in the De Lory concession of the seigniory of Rigand Vaudreuil, have taken out within the last eight days 40 css. of gold, worth about \$700, making an average of \$87.50 a day, or \$17.50 each man per day. In other parts of the seigniory preparations are being made by individuals and private companies, who have leased extensive mining claims from the De Lery Company, to carry on mining operations on a large scale, both on the alluvial deposits in the several streams and rivers which abound in the seigniory, and the numerous auriferous quartz veins by which the seigniory is known to be reticulated. At several places out of the seigniory also, and more particularly in the township of Jersey extensive works are being carried on to develope the rich auriferous deposits which are there known to exist.—Quebec paper,

Projected New Companies.

Company.	Capital.	Shares.	Each £ 10
Steeple Aston Iron Ore Company			
Phoenix Iron and Colliery Works Mortgage Assurance Corporation			
Puerto Cabello and Central Venezuela Railway.			10
United Kingdom and Continental Marine In- surance Corporation	100,000		
Hale Bank FoundryColgnets Concrete	12,000 50,000		

UNITED KINGDOM AND CONTINENTAL MARINE INSURANCE COR-

mum sum of 50001, per annum, and such further sum or sums as the members in general or extraordinary general meeting from time to time determine.

UNITED KINGDOM AND CONTINENTAL MARINE INSURANCE CORFORATION.—The objects for which this company is established are the general business of marries insurance upon vessely, freights, and cargoes in the United Kingdom and elsewhere, and the doing of all such other things as are incidental or conductive to the attainment of the above objects. The capital of the company shall consist of 100,0001, divided into 10,000 fully paid-up shares, represented by share-warrants to bearer of 101,000 fully paid-up shares, represented by share-warrants to bearer of 101,000 fully paid-up shares, represented by share-warrants to bearer of 101,000 fully paid-up shares, represented by share-warrants to be acre of 101,000 fully paid-up shares, represented by share-warrants to be acre of 100,0001, divided into 1,000 fully paid-up shares, represented by share-warrants to be acre of the company in the event of the same being wound-up during the time that he is a rember, or within one year afterwards for payment of the debts and liabilities of the company, contracted before the time at which he ceases to be a member, and the costs, charges, and expenses of winding up the same, and for the adjustment of the rights of the contributories amongst themselves, such amount as may be required, not exceeding 2001. The directors shall be elected annually by the company in general meeting. The number of directors, such amount as may be required, not exceeding 2001. The number of directors, shall be determined by the subscribers to the Memorandum of Association. Until the directors are appointed, the following subscribers to the Memorandum of Association shall, for all the powers of this Act, be deemed to be directors:—Charles A. Webster Webster and the same properties of the Memorandum of Association shall, for all the powers of this Act, be deemed to be directors:—Charles A. Webster Webster and the same

STEEPLE ASTON IRON ORE COMPANY, 30001, in 300 shares of 101. each.—The objects for which the company is established are the acquisition by purchase, from Mr. EDWIN CARTER, of an agreement for a lease, dated Nov. 26, 1866, of a certain mineral property, situate on the farm of Westfield, in the parish of Steeple Aston, in the county of Oxford, and known by the name of the "Steeple Aston Iron Mine," and all the right, title, and interest whatsoever, both at law and in equity, of the said EDWARD CARTER, in to, out of, or upon the said agreement. mine, property, and premises, and subsequently to acquire "Steeple Aston Fron Mine," and all the right, title, and interest whatsoever, both at law and in equity, of the said EDWARD CARTER, in to, out of, or upon the said and an equity of the said EDWARD CARTER, in to, out of, or upon the said and entered, and to work the said unte, or mineral property, in a miner-like manner; and to sink shafts, drive levels, erect all necessary water-wheels, or such other machinery or appliances as may be found necessary or most expedient; together with workshops, dwelling-houses, or other buildings, for the purpose of facilitating the raising from the said mine, or mineral property, iron ore and other mineral substances from the said mine, or mineral property, iron ore and other mineral substances from the said mine, or mineral property, iron out such other works and things as may be deemed necessary and advisable to make such minerals merchantable and marketable for disposal, and for the general conduct and management of the affairs of the company, and the doing of all such other things as are incidental or conduct to the attainment of the above objects. The subscribers to the memorandum are H. Scobell Perrinty, 2, Mary's Cottages, Bath-roal, Goborne-road, Hounslow, genieman, 1; Tros. Gladwin, 16, Water-lane, Tower-street, London, hop merchant, 1; Wal. H. Gran, St. Austell, Cornwall, engineer, 1; Jas. MUNY, 7, Leopold-street, Vauxhall, Surrey, potter, 1; Rob. Alpha Cox, 183, Barnsbury-road, Islington, Midlesex, law stationer, 1; John Baptist A. Wolpeitt, 3, Birchin-lane, Cornhill, London, advertising agent, 1; Hanny J. Pellew, 2, New Bridge-street, Vauxhall, Surrey, cork bed manufacturer, 1. The first directors to be chosen by a majority of the subscribers to the Memorandum of Association. Qualification, jud shares. Remuneration 200, per annum, and when a dividend of 101, per cont. per annum shall be declared on the paid-up capital of the company it shall be increased to 800, per annum, and the further sum of 100, for every additional 101, per cent. dividend thereafter paid.

increased to 300t, per annum, and the further sum of 100t, for every additional lot, per cent. dividend thereafter paid.

COIGNET'S CONCRETE COMPANY, 50,000t, in 25,000 shares, of 2t, each, with power to increase.—The objects for which the company is established are the carrying on the trade or business of concrete manufacturers, and contractors for works in concrete. The acquiring from the Societé Centrale de Beton Agglomèrés (système Coignet) of Paris, all patents now existing or to be taken out hereafter, for Great Britain and Ireland and the British Colonies, except India, relative to their concretes, or the machinery or apparatus employed in the manufacture or application thereof, &c. The transaction and doing of all such other things as are incidental or conducive to the attainment of the above objects. The memorandum is signed by—Woodthope Brandon, Barnes Common, S.W., barrister-at-law, i.; Andbew Hv. Cockerton, Ashchurch Grove, Hammersmith, W., merchant, i.; Charles David, 25, Tolmer's-square Hampetad-road, merchant, i.; John Norton, 24, Old Bond-street, London, W., architect, i.; JAMES HARROWELL, Epsom, solicitor, i.; JACOB MICHAEL, 9, Barge-yard, Bucklersbury, London, solicitor, i.; HECTOR FRANCIS MONRO, 42, Cambridge-street, Hyde Park, gentleman, i. Every shareholder holding not less than 30 shares in his own right shall be eligible as a director, provided all calls made on all his shares shall have been paid. The number of directors shall never be less than three nor more than seven. The following shall be the first directors—Woodtroorpe Brandon, Peter Le Neve Foster, Hector Prancis Monro, and JOHN Norton, Essa. The remuncration of the directors of the company shall be a sum to the directors collectively equal to 10 per cent, of the amount of all profits available for division.

HALE BANK FOUNDRY.—The objects for which the company is es-

HALE BANK FOUNDRY .- The objects for which the company is es-HALE BANK FOUNDRY.—The objects for which the company is established are the carrying on the business of ironfounding and engineering to all its branches, and the doing all such things as are incidental or conductive if the same. The nominal capital is 120,000f., in 120 shares of 100f. each, with power to increase. Number of directors, three. The memorandum is signed by —DAVID GAMBLE, Windleburst, St. Heien's, Lancaster, manufacturing che mist, 30; SAML. STOCK, Blackley Hurst, Billinge, Lancaster, coal proprietor, 30 WM. THORBURN, 4. Oak Bank-terrace, Whitehaven, Cumberland, ironmaster, 2 JAS. HADDOCK, Windle Cottage, St. Heien's, Lancaster, coal proprietor, 2 ANDREW SHIRLAW, Ditton, near Warrington, Lancaster, engineer, 40; JOHN THORBURN, Mersey View, Halewood, near Warrington, Lancaster, ironmaster 6; EDWAND PIERPOINT, 18, Chapel-street, Liverpool, coal agent, 6. The three first directors subscribers to Momorandum of Association.

DIAMONDS IN BRAZIL.—In Goyaz a new diamond tract has been discovered, 65 miles from Catalao, in the district of Santo Antonio de Rio Verde, Several first-class stones have been picked up, some of them 55 grains in weight. Diamond washers were flocking to the spot; 500 were already there, and the number was continuously on the increase.

With this week's Journal we give a SUTPLEMENTAL SHEET, containing the report on the Apparatus and Processes of the Art of Mining and of Metallurgy shown at the Paris International Exhibition, prepared by order of the Committee of Council on Education, by Prof. Warington Smyth, M.A., F.R.S.; Foreign Mining and Metallurgy; Reports on Foreign Mines—Alamillos, Linares, Fortuna, and Pontgibaud; Ice in Deep Mines, &c.

The Mining Market; Prices of Metals, Ores, &c.

£ s. d. £ s. d.

METAL MARKET-LONDON, OCTOBER 11, 1867.

3	Best selectedp. ton 84 0 0- 85 0 0	Bars Welsh, in London 6 10 0
١	Tough cake and tile 79 0 0-80 0 0	Ditto, to arrive 6 10 0
,	Sheathing & sheets. 81 0 0-82 0 0	Nail rods 7 0 0- 7 10 (
•	Bolts 83 0 0	Staffd, in London 7 10 0-8 10
١	Bottoms 85 0 0	Bars ditto 7 10 0- 9 10 0
ĸ	Old (Exchange) 79 0 0	Hoops ditto 8 10 0- 9 12 6
	Burra Burra 85 0 0- 86 0 0	Sheets, single 9 5 0-10 0 0
	Wireper lb. 0 1 0- 0 1 0%	Pig No. 1, in Wales 8 15 0-4 5 0
۱	Tubes 0 0 11% 1 0	Refined metal, ditto., 4 0 0-5 0 0
J		Bars, common ditto., 5 15 0-6 0 0
I		Do. mrch. Tyneor Tees 6 10 0
ı	Sheetsper lb. 9d10d.	Do., railway, in Wales 5 10 0-6 0 0
ı	Wire , 81/6d91/6d.	Do., Swed. in London. 10 5 0-10 10 0
١	Tubes , 1012d11d.	To arrive
١	Yellow Metal Sheath.p. lb. 71/4d	Pig, No. 1, in Clyde 2 14 9-3 1 6
Į	Sheets	Do. f.o.b. Tyne or Tees 2 9 6
ı		Do. Nos. 3,4,f.o.b. do. 2 6 6-2 7 0
ı	SPELTER. Per ton.	Railway chairs 5 10 0- 5 15 0
ı	Foreign on the spot. £21 10 0	, spikes11 0 0-12 0 0
ı	to arrive 21 10 0	Indian Charcoal Pigs,
1	zinc.	in London p. ton., 7 0 0- 7 10 0
۱	In sheets £27 0 0	
۱		STEEL. Per ton.
۱	TIN.	Swed., in kegs(rolled)14 5 0
۱	English blocks 96 0 0	, (hammered) 15 10 0-15 15 0
ı	Do., bars (in barrels) 97 0 0	Ditto, in faggots16 0 0
ı	Do., refined 99 0 0	English, spring17 0 0-23 0 0
ı	Banca£92 0 0-93 0 0	QUICKSILVER (p. bottle) 6 17 0
ı	Straits 89 0 0	LEAD. Per ton.
ĺ	TIN-PLATES.* Per box.	
ı	-	English Pig, com19 12 6
ı	IC Charcoal, 1st qua. 1 7 6-1 9 6	Ditto, LB20 0 0
I	IX Ditto, 1st quality 1 13 6- 1 15 6	Ditto, WB21 15 0
ı	IC Ditto, 2d quality 1 5 6-1 7 6	Ditto, ordinary softt 20 0 0
I	IX Ditto, 2d quality 1 11 6-1 13 6	Ditto, sheet20 10 0-20 15 0
į	IC Coke 1 3 6-1 4 6	Ditto, red lead 20 15 0-21 5 0
l	IX Ditto 1 9 6- 1 10 6	Ditto, white27 0 0-80 0 0
ı	Canada plates, p.ton13 10 0	Ditto, patent shot23 0 0
ł	Ditto, at works 12 10 0	Spanish
ı	A A + + he moules to 4	- 1- 44 t t

* At the works, 1s. to 1s. 6d. per box less. † A Derbyshire quotation: not generally known in the London market.

REMARKS.—Very little alteration has taken place in the Metal Market during the past week, still it is certainly not in a worse position than it was, and, if anything, may be said to be rather better. It is only by gradual steps that we can expect to have a general revival in the metal trade, as the depression has now been of such long continuance, and buyers seem to have imbibed a more than usual amount of caution in entering into operations, and still appear to hesitate before giving out their orders. These feelings, however, we may anticipate will be removed by degrees, and then we shall find that orders are given out with former confidence. Fortunately, there now seems not much fear that, for the present at least, war will break out on the Continent, as the Emperor Napoleon seems determined to carry out his celebrated assertion that "The Empire is Peace," and it is to be hoped that he will continue to adhere to this statement, and that nothing will occur to disturb the present peaceful state of the European nations. This reiteration of a peaceful policy on the part of the French Emperor is calculated to allay the fears which were entertained of a contrary character, and will, in some measure, tend to produce a better feeling in commercial affairs, as everything that is likely to produce an improvement in business generally will REMARKS .- Very little alteration has taken place in the Metal that is likely to produce an improvement in business generally will be received with satisfaction. There is certainly an improvement in the orders for metals from America, which is gratifying, as in ordinary conditions of the trade a very large quantity of metals are shipped to the United States, and some portions of the metal trade are particularly affected by the extent of the orders from thence, consequently any improvement in them is most welcome.

Coppers—Business generally has not been very active in this metal.

shipped to the United States, and some portions of the metal trade are particularly affected by the extent of the orders from thence, consequently any improvement in them is most welcome.

COPPER.—Business generally has not been very active in this metal during the week, but latterly there seems to be a little better feeling springing up, and prices are rather firmer than they were, especially for Chili bars, in which business has been done in Liverpool at 694. 10s. IBON.—The last of the Quarterly Meetings of the South Staffordshire Ironmasters was held at Wolverhampton, on Wednesday. The attendance was very small, and scarcely any business was transacted, and altogether the present were the quietest quarterly meetings ever experienced. The fact is, everybody seems disposed to abstain as much as possible from entering into engagements; and the more makers press sales the less disposed the buyers are to operate; and, in such circumstances, nothing is to be done but to wait patiently until business comes round in a natural way. There is a large specification for finished iron out through Government, which is believed to be on account of a foreign country; it is chiefly for bar and angleiron, but it is not very probable that it will come to South Staffordshire. In Welsh, at the various works in the district it cannot be said that the trade has improved to the extent which the feeling that set in some weeks since led many to anticipate, but the devenue and the set in some weeks since led many to anticipate, but the devenue and the set in some weeks since led many to anticipate, but the devenue and the set in some weeks since led many to anticipate, but the devenue and the set in some weeks since led many to anticipate, but the devenue and the set in some weeks since led many to anticipate, but the devenue and the set in some weeks in the devenue and the set in some weeks in the devenue and the set in some weeks in the devenue and the set in some weeks since led many to anticipate, but the devenue are set in some we said that the trade has improved to the extent which the feeling that set in some weeks since led many to anticipate, but the depression has continued so long, and been so severe, that anything like a restoration to its previous activity cannot be expected at once. On American account there is a considerable quantity of iron being shipped, and if present anticipations are realised shipments to the United States will continue to increase for some time to come, and the same may be said respecting the British American possessions. In Swedish iron there is not much doing at present; several parcels are expected to arrive shortly, and prices remain as last quoted. In Scotch pig-irona good business has been done, and prices have rather advanced, the last price received from Glasgow being 54s. 7d. cash.

LEAD.—A moderate business continues to be done, and prices are tolerably firm at the quotations.

LEAD.—A moderate business continues to be done, and prices are tolerably firm at the quotations.

TIN.—The market for Straits has been flat during the week, partly in consequence of lower prices being quoted for Banca in Holland, which has caused the price of Straits to decline here, and business to a limited extent has been done at \$94, cash. English is also dull, and transactions have occurred a little under official rates.

SPELTER has remained rather inactive, and only a limited amount of business has been done; the price on the spot, however, still remains firm at 211. 10s. The stock in London on Sept. 30 was 3681 tons, being a decrease of \$2 tons during the month.

TIN.PLATES.—Stocks in the hands of manufacturers are very low:

TIN-PLATES. - Stocks in the hands of manufacturers are very low the orders on the books, however, are good, and the works generally well employed.

STEEL and QUICKSILVER not much doing.

BIRMINGHAM, OCT. 11.-Rylands' "Iron Trade Circular" sayssult is that pigs are from 1-16th to 1-8th better Scotch were steady; Cleveland improving; ma-ker. Although stocks are low, orders, taken alfor marked brands. nufactured iron weaker. together, are better than on last quarter-day.

LIVERPOOL, OCT. 10.-Messrs, Knowles, Gorst, and Riso write : Copper: Attracted by the low prices, French and English amelters have entered into large contracts for Chili bars, ingots, and regulus during the past week, at prices ranging from 68l. to 69l. for bars, and 14s. to 14s. 3d. for regulus: market closes better, 70l. being now generally asked for good bars. In has gone quiet since the Dutch sale, and prices have given way for Banca, Straits, and English from 1l. to 2l. per ton.

MIDDLESBOROUGH, OCT. 10.-The "Iron Trade Review" The iron trade of the Cleveland district continues rather better in tone, and prices are decidedly firmer for next year's deliveries. Stocks have gone down about 10,000 tons during the month of September. Manufactured iron continues in much the same condition as last reported. Rail-mills more fully occupied than any other class of works.

COAL MARKET.-The fresh arrivals this week only number 97 ships Household coals have been in active demand, and in some instances 3d. to 6d. per ton dearer. Hartley coals have also met with some enquiry, and quote a rise in prices of 6d. Hetton Wallsend, 22s,; Original Hartlepool Wallsend, 22s.; Braddyll's Wallsend, 21s.; New Belmont Wallsend, 20s.; Kelloe Wallsend, 20s.; South Hartlepool, 20s.; Hetton Lyons Wallsend, 19s. 9d.; Tunstall Wallsend, 19s. 9d.; West Hartley, 18s. 6d. Unsold, 3 cargoes; at sea, 10 ships.

The MINING SHARE MARKET has been very dull this week, both in regard to the prices of shares generally and in the amount of in regard to the prices of shares generally and in the amount of business transacted, though a better tone pervaded it after it became known, on Thursday, that the standard for copper ore had risen II. perton. The shares mostly dealt in have been Prince of Wales, East Catadon, Marke Valley, Great Wheal Vor, Great Laxey, Chontales, Wheal Buller, Grenville, Chiverton Moor, North Treskerby, West Chiverton, Wheal Basset, South Frances, and a few others. Prince of Wales, 52s. 6d. to 55s.; the 55 east has commenced driving, worth 10l, per farthom. Other parts are the same as last week. Wheal Greatille shares advanced to 34s., and leave off 29s. to 31s.; the agent is now satisfied that the lode cut below the 120 is the caunter copper lode, and when down to the 130 (in 2 fathoms more) driving will be commenced upon it. The tin lode is worth from 70l. to 80l, per fan, and set to drive at 4s. in 1l. East Caradon shares have advanced to 6, 64; at the meeting, held at Salisbury, no dividend was declared. The profit on the quarter was 461l. 18s. 11d., and the balance in had 2908l. 12s. 3d. Three important points will come off in the mine within a few months, and upon which its future prosperity will depend—1. In about a month it is expected to cut the junction of the caunter and south lodes in the 115, and the indications, we understand, are such as to lead to the expectation of very favourable results.—2. The cross-cut north in the 50, which has been driven for some years, is expected to cut two or three lodes; and, 3. Secombe's lode will be met with in the 60 in about a month. Marke Valley, 6 to 64; at the meeting the accounts showed a profit on the quarter of 1894l. 10s. 8d., and a dividend of 4s. per share (1800l.) was declared; and, after paying 500l. also towards the new leases, the balance left in hand was 2076l. 13s. 9d. The mine is looking will, and the various stopes and pitches continue to produce their usual quantities of ore. Great Retallack, 3‡ to 4. The mine will sample 20 tons of good lead on Wednesday next. business transacted, though a better tone pervaded it after it became known, on Thursday, that the standard for copper ore had risen

Ann, 161 to 171; Wheal Seton, 105 to 110.

Ann, 16½ to 17½; Wheal Seton, 105 to 110.

The Market for Mine Shares on the Stock Exchange during the week has been active. East Caradon shares, on Monday, were offered as low as 5½; but on purchases and on it becoming known that the ground is much more favourable in appearance for copper, where the lode will shortly be seen 15 fathoms deeper than hitherto worked, shares rose on Wednesday to 6½, 6½, and a large business was done. Marke Valley shares have also risen, and command a ready market. The mine is looking very well. West Chiverton continues to improve in the bottom levels, and from the permanence for dividends established by large reserves the investing public continue to absorb shares. Great Laxey shares are firm at 18 to 18½. The lode in the 190 north is 12 feet wide, composed of lead and blende; this part of the mine is opening up extremely rich, and the prospects for permanence are very good. Chiverton and Chiverton Moor shares have steady, and the prospects are unchanged. North Crofty Mine is very promising, and shares have been dealt in to some extent. Gold mines command a fair amount of attention. Don Pedro shares have risen, and are in favour. Del Rey shares are rather flatter. Chontales, fully paid up, have been dealt in at about par to ½ prem. Royalty shares, 3% to 4% (5% paid); ordinary shares less firm. The advices by the next mail are anxiously looked for. Several of the Brazilian mines—Anglo-Brazilian, Rossa Grande, &c.—are fractionally higher. Westminster Lead (Limited) is looking well in the bottom levels both east and west, and in the shaft is improving.

The Fremator Granite Quarries Company, with a capital of 30,000l., in shares of 5l. each, has been formed for purchasing the lease, 33 years unexpired, granted by the Duke of Bedford, of the quarries of the same name, situated near the village of Gunnislake, about 34 miles from Tavistock, and 26 miles from Plymouth. The quarries have been examined and favourably reported upon by Messrs. D. K. Clark and T. Whitaker. The quarries are well supplied with proper buildings and materials, which are in good repair. The texture of the granite is a fine grit, free from the large horse-tooth spar so often found; it resembles the Haytor granite, is of a clear blue colour, is lighter than the Aberdeen granite, and considerably harder, and will bear a greater pressure than the granite which is obtained from the quarries near Prince Town, Dartmoor, or from the quarries further west, in the county of Cornwall. The strata, or bed of the rock, being well defined, it will be found to cleave, or split, better, and is more easily converted into kerb or pitching, and the smaller sizes required for street paving; thus working up beneficially the small stuff, which is often useless, from the difficulty and cost of working. The purchase-money has been fixed and movable plant; the payment is to be made, 11,000l in cash and 2000l, in paid-up shares. The minimum rent is 100l, per annum, merging into a royalty of 6d. per ton for large blocks; 4d. for small; and 2d. for pitching. The granite has been largely used, and a profit of 15 per cent, is anticipated. It is proposed 20 per cent, of any profits that may be realised is to form a reserve fund for extensions and improvements. improvements,

At Redruth Ticketing, on Thursday, 1737 tons of ore were sold, realising 74971. 18s. 6d. The particulars of the sale were:—Average standard, 1114. 198.; average produce, 6¶; average price per ton, 44. 6s. 0d.; quantity of fine copper, 109 tons 13 cwts. The following

standard, 1114, 198.; a verage produce, eg; average price per ton, 44, 68, 04.; quantity of fine copper, 109 tons 13 cwts. The following stre the particulars of the sales during the past month:—

Date. Tons. Standard. Produces. Per ton. Per unit. Ore copper, 1294 ... 2116 19 0 ... 534 ... 28 18 6 ... 138.9d. ... 268 15 0 ... 26 ... 2080 ... 104 70 ... 534 ... 49 0 ... 14 644 ... 72 18 6 ... 28 ... 2080 ... 104 7 0 ... 546 ... 4 9 0 ... 14 644 ... 71 18 0 0ct. 3 ... 3200 ... 110 3 0 ... 546 ... 4 7 0 ... 13 6 ... 67 8 0 ... 10 ... 1787 ... 111 19 0 ... 634 ... 4 6 0 ... 13 8 ... 68 6 0 Compared with last week's sale, the advance has been in the standard 14, and in the price per ton of ore about 1s. 44. Compared with ll., and in the price per ton of ore about 1s. 4d. Compared with last week's sale, the advance has been in the standard the corresponding sale of last month, the decline has been in the standard 16s., and in the price per ton of ore about 9d.

At Creegbrawse and Penkevil United Mines meeting, on October 4, As Creegorawse and Fenkevil United Aines meeting, on Octobe the accounts showed a credit balance of 5881. 2s., the profit on the six me operations amounting to 5931. 8s. 2d. A dividend of 5991. (II. per share declared, leaving a balance of 761. 2s. to be carried forward to the credit next account. The report of the agents stated that, notwithstanding the portasince the meeting have been considered sanguine, it would be seen, fro accounts produced to-day, as well as from the returns, that they have been borne out, not by diminishing the tutwork operations, but by increasing it as a proof of which they had 86 persons on tutwork and only 19 on tribute; although they have sold the tin as per accounts submitted, they have over 16 on the mine broken.

At Marke Valley Mine meeting, on Wednesday (Mr. B. Warburton in the chair), the accounts for the three months to date showed a credit balance of 24611. 16s. 5d., and a profit on the three months' working of 1894. 16s. 8d. additioned of 18001. (4s. per share) was declared. The salary of Captain Truscots

as raised from 61.6s. to 81.8s. per month, and that of Mr. Thorne from 61.6s. as raised from 61.6s. captain John Truscott reported that

was raised from 61. 6s. to 81. 8s. per month, and that of Mr. Thorne from 61. 6s. to 81. 7s., and thanks were voted to them. Captain John Truscott reported that 10 16. 7s., and thanks were voted to them. Captain John Truscott reported that the various stopes and pitches continue to produce their usual quantities of ore. The appearances of the mine are of a very gratifying character.

At Carn Brea Mines annual meeting, the accounts showed a loss on the vorkings to end of December, 1866, of 5957. 1. Iss. 3d. The amount credited free opper ores raised in that period is 6852. 7s. 9d., and for thorse 18,4071. 3s. 9d.; for copper ores raised in that period is 6852. 7s. 9d., and for thorse 18,4071. 3s. 9d.; for copper ores raised in that period is 6852. 7s. 9d., and for the research of 1865, 31. 8657. shown are the copper price for 1866 was 464. 4s. 7d., or a difference of 71. 17s. 16. less per the average price of 1866 was 464. 4s. 7d., or a difference of 71. 17s. 16. less per the average price for 1866 was 464. 4s. 7d., or a difference of 71. 17s. 16. less per the average price for 1866 was 464. 4s. 7d., or a difference of 71. 17s. 16. less per the average price for 1866 was 464. 4s. 7d., or a difference of 71. 17s. 16. less per the average price for 1866 was 464. 4s. 7d., or a difference of 71. 17s. 16. less per valid provious to getting into a dividend position was 15,0004. The pilant is valid a last 720,0004. and the lowest in 1866 (20004.)

At East Rosewarne Mine meeting, on Friday (Mr. W. Ogilvie in the chair), the accounts for the four months ending July showed a debit basic, when the 1977. 16s. arrears of call are paid, of 1571. 1s. 9d. A call of 2s. 18s. 18s. 20s. A call of 18s. 18s. 20s. A call of 18s. 18s. 20s. A call of 18s. 20s.

including 41 covard.

At the West Rose Down Mine meeting, on Wednesday (Mr. R. W. Althe West Rose Down Mine meeting, on Wednesday (Mr. R. W. Childs in the chair), the accounts showed a credit balance of 461, 3s. 7d. A call of 10s. per share was made. Capt. John Truscott reported that the prospects of the mine are encouraging as it becomes further developed.

At Carn Camborne Mine meeting, on Wednesday (Mr. W. Fawcett is the chair), the accounts for the three months to date showed a debit balance of 461, 19s. 7d., and a balance of assets over liabilities of 1794, 13s. 10d. A call of 1s. per share was made. Capt. John Truscott reported upon the various points of 1s. per the contract of 1s. per t

sis per share was made. Capt. John Truscott reported upon the various points of operation.

In Hill Mine meeting, on Thursday, the accounts showed a selt balance of 417t. 3s. 8d. A call of 4s. per share on 2913 shares was made, add the report on the mine considered very satisfactory.

At North Levant Mine meeting, on October 5, the accounts showed a debt balance of 351t. 12s. 11d. The report of Capt. J. Nancarrow stated that the time did not seem far distant when this property will become more valuable the shareholders. The agents' report stated that, judging from the appearance of the lodes, and their geological position, they could not but think that they are expected the shareholders. The agents' report at a state their returns of the for the set is months will be about sufficient to pay the costs of the mine.

At Nanglies Mine meeting, on October 1, the accounts showed a subtained of \$72t. 2s. 8d. A call of 17s. per share was made. Lord Falmonth laving findly consented to give up his done from August 1, it was resolved that the stopes in back of the 120 were nearly exhausted, but they think a first-class speculation to explore certain lodes by means of cross-cuts. It suboped the first would be cut in six months.

At South Wheal Seton meeting, on October 3, the accounts showed a

as hoped the first would be cut in six months.

At South Wheal Seton meeting, on October 3, the accounts showed a selibalance of 9184. 128-104. A caliof 21, 10s. per share was made. The agents' soft stated that they expected to cut the south lode fin about three months; as are pleased to find a little copper ore in the branch recently passed through, is favourable indication for productiveness of the south lode when opened on. by still had to advise the sinking of the engine-shaft with all possible speed, likely to be most effective in proving the value of the mine.

At North Treakerby Mine meeting, on Tuesday, the accounts showed law on the four months' working of 6111. 5s. 7d., reducing the balance in factor of the mine from 7851. 18s. to 2741. 12s. 5d.—The ore sold on Sept, 26, to come the credit of the next account, amounts to 17411. 12s. 10d.

On the Stock Exchange, a moderate amount of business has been hassacted in Mining Shares during the week. The following prices we officially recorded in British Mining Shares:—Devon Great Consis, 430, 4283, 425; East Caradon, 53, 54, 6, 64; Great Wheal Vor, 15, 18; Marke Valley, 64, 6; North Wheal Crofty, 4½; Great Laxey, 8; West Basset, 4; Prince of Wales, 2 11-16; Providence, 29. In Monial Mining Shares the prices were—Port Phillip, 1 5-16. 1½; ape Copper, 64, 64, 64; Scottish Australian, 11-16, 1½. In Foreign Bining Shares the prices were—Alamillos, 15-16; Chontales, 44, 13-16, 4½; Don Pedro, 2½, 2½, 25-16, 2½ prem.; St. John del Rey, 15, 59, 584; Panulcillo, 2½; Anglo-Brazilian, 9-16, ½; Pestarena, 150-2½; Rossa Grande, 7-16 to 9-16.

10 21: Kosaa Grande, 7-16 to 9-16.
The Bank of England Return for the week ending on Wednesday
med in the ISBUE DEPARTMENT adocrease in the "notes issued" of 507,555.
The Bank of England Return for the week ending on Wednesday
the is represented by a corresponding decrease in the coin and bullion on the
risde of the account. In the BANKING DEPARTMENT there is shown a demase on the "other deposite" of 127,0194., and in the "seven day and other
""673,0458. together 157,4771.; and an increase in the "public deposite"
(153471., and in the "rest" of 38891., together 33,8271.—123,6591.; and deductgrammins a feercase in the "other securities" on the asset side,
in remains a decrease in the total reserve of 35,1011.

Apetition for winding-up the New Mansfeld Copper and Silver Ring Company (Limited) is to be heard before Vice-Chancellor Malins, at the light Hotel, Godalming, on Wednesday.

Orditors of the Continental Gas and Water Company (Limited) is required to send the particulars of their claims to Mr. E. P. Rowsell, of isseinrel-street, the liquidator, by the 20th Instant.

Deditors of Gale's Protected Gunpowder Company (Limited) are believed to send the particulars of their claims to Mr. C. F. Kemp and Mr. H. Ette, the liquidators, by the 31st instant.

ED MINING IN ITALY.—The directors of the Pestarena United with a fining 1 n Tralt.—The directors of the Festarena United Mining Company have received the following telegram:—"Palters, Oct. 9: Remittance of gold to office, 1047 ozs." This remitters has been obtained from amalgam produced since Aug. 27. Its im may be estimated at something like 3500l., while the monthly are about 1700l. to 1800l. By the report (which appears in antercolumn) it will be seen that the development of these mines is Excellumn in the intervence of the second of the sec Tessing most satisfactorily, and as soon as the improved means the carriage of the ore shall have been completed, which will be the case, it is expected the monthly expenditure will be hished, and the returns increased.

beswarne Consols.—An important discovery in this mine is set. The lode in the 80, which was worth 4l. per fm. last week, he worth 20l., and improving. This is the important point resit in Capt. James Pope's special report of March 18.

In Miners' Association of Devon and Cornwall. — The by Association for Devon and Cornwall is about to extend its operations by a season of the season of the

LUTY OF ENGINEERS.—At the meeting of members on Monday V.H. Le Feuvre, President), a paper was read by Mr. Ewing Matheson On sality of Iron as now Used. A discussion took place on Mr. Vaughan See paper On Water TubeBoilers (read on May 6.) Mr. William James Bell and Mr. Charles Jones, were duly elected as members. The names of stidates for election at the next ballot were announced.

Copper Trade.—Messrs. Vivian, Younger, and Bond (Oct. 11)
be large business in Chili bars reported in our last has not been folby further purchases at the advanced price of 701, per ton now asked
is indeed, the only sale we have to report in this description is about
at 691, per ton. In Urmeneta ingois, however, about 300 tons changed
but has been sold in quantity at from 781, to 791, the price now asked
this cannot be procured. Altogether the market is very quiet, withsalty any atrong tendency either way. Tough copper is reported as
it to 751, per ton to a small extent, but the business generally in Engopper and Australian sorts is almost mit.

UNG IN COAL MINES — James Crook and Joseph Cook were

NG IN COAL MINES,—James Crook and Joseph Cook were Bolton, with smoking in one of the mines of the Hulton collieries, as to be worked with safety-lamps, in consequence of the presence of sen confessed their gullt, but having good characters, they got off minal penealty of 5s. costs and a reprimand.

AKS COLLIERY.—On Wednesday an important change was collier.—On Wednesday an important change was sometion with the re-opening of the mine. At the last meeting of the file general committee asked Mr. Dymond, the managing partner, to lear of the duties, and place entire responsibility in the hands of one. That committee have now terminated their labours, and the entire sent of re-opening the mine has been placed in the hands of three of the shart of re-opening the mine has been placed in the hands of three of the shart of re-opening the mine has been placed in the hands of three of the shart of the same period in the hands of three of the shart of the same period in the hands of the file of the same period in the proceedings will be henceforth under the control of same means of the proceedings will be henceforth under the control of same means of the proceedings will be henceforth under the control of same means of the proceedings will be henceforth under the control of same means of the proceedings will be henceforth under the control of same means of the proceedings. The box-hole has been entirely cleared out, without finding any more bodies; and a stopping have been fixed in the doorway, the wall of the box-hole having been broken through by some means and thus communicating with a back roadway, and consequently leading into the workings. The men are now sending spoil out from between Nos. 1 and 2 shafts.

BESSEMER STEEL.—An objection made against Bessemer steel is that the ingots on cooling are full of blow-holes. To obviate this, moulds are now used which rotate slowly on their axis after the metal is run in. The effect of the movement is to favour the escape of gas at the centre of the mass, which retains the molten condition longest, and to produce complete consolidation. Pollshed sections of an ingot cast under rotation exhibit but few or none of the black specks common in other specimens, supposed to result from the air bubbles or blow-holes, as they are called in some foundries.—Athenæum.

or blow-holes, as they are called in some foundries.—Athenacum.

THE "GLEN OSMOND."—This fine ship, built expressly for the Adelaide trade, by Messus. James Laing and Co., of Sunderland, is owned by Mr. W. A. Stevens, of Wisbeach, and commanded by Capt. H. R. Angel, late of the "Verulam." Her dimensions are as follows:—Length over all, 199 ft.; breadth, 34 ft.; depth, 19 ft.; classed 16 years A 1. The frame is of iron, covered with teak planking 5½ in. in thickness, and fastened with copper boits. She is beautifully modelled, will carry a large spread of canvas, and is confidently expected to attain very great speed. Her saloon and cabins are fitted regardless of expense, while the comfort of passengers has been studied.—Mark Lane Express.

The Emperor of Russia has ordered the establishment of a commission, charged to enquire into the best means of extracting and employing anthracite coal from the rich beds in the territory of the Don Cossacks.

TO MINING AND SMELTING COMPANIES.—WANTED, by the Advertiser, a SITUATION as ASSAYER of COPPER, TIN, LEAD, SILVER, GOLD, IRON, &c. Accustomed to sampling, weighing, and shipping of ores for several years, in connection with the assaying. The Advertiser has all the necessary assay tools if required. References on application, Address, "L. C.," MINING JOURNAL Office, 26, Fleet-street, London, E. Q.

WANTED, by a MINING AGENT, just returned from abroad, a RE-ENGAGEMENT. The Advertiser thoroughly understands Mining in all its branches, and can produce the highest testimonials as to character and abilities. Abroad preferred.

Address, "M. A. T.," MINING JOURNAL Office, 26, Fleet-street, London.

TO MERCHANTS, ACCOUNTANTS, AND OTHERS.

WANTED, by the ADVERTISER, a SITUATION as CLERK.
Well qualified, and can be highly recommended. Salary expected years.
Apply to "Trebo," Post Office, Neath.

WANTED, an EXPERIENCED and CONFIDENTIAL CLERK accustomed to the SALE and PURCHASE of METALS. He must have a perfect knowledge of the trade in tin-plates, and be a good correspondent. Commencing salary about £300 per annum.

Apply by letter, stating full particulars, to "E. N.," Messrs. Dawsch and Jone, 121, Cannon-street, London, E.C.

WANTED IMMEDIATELY, in a MINING ENGINEER,
LAND, and BUILDING SURVEYOR'S OFFICE, a WELL-EDUCATED
YOUTH, of from 14 to 15 years old, as an ARTICLED PUPIL. Promium not
so much an object as that he should soon be able to render services in the different branches of his profession.
Address, "Mining Engineer," MINING JOURNAL Office, No. 26, Fleet-street
London, E.C.

ANTED IMMEDIATELY, for the WHEAL EMILY
MINE, in the parish of CALLINGTON, CORNWALL, a RESIDENT
AGENT, who understands all the requirements in mining.
Parties applying for the same will send age and copies of testimonials of obsracter to the manager, Capt. WILLIAMS, at No. 9, Clarence-street, Plymons,
Devon, on or before the 19th instant.—Dated Oct. 7, 1867.

WANTED IMMEDIATELY, either new or secondhand, a 60 or 70 in. cylinder PUMPING ENGINE, with adequate boiler or boilers complete, for the WHEAL EMILY MINE, situate in the partsh of CALLING-TON, CORNWALL. Parties desirous of supplying the same will send their price, addressed to the manager, Capt. WILLIAMS, No. 9, Clarence-street, Tomouth, Devon.—Dated Oct. 7, 1867.

WANTED, a GOOD GRANITE QUARRY SETT, on moderate royalty and minimum rent. The property should be situated within a fair distance of London, and convenient for economical working, quality of the rock good, and rates of carriage easy. Full description and sketch of property, with terms of lease, to be addressed to "Capitalist," MINING JOURNAL office, 26, Fleet-street, London.

WANTED, a SECOND-HAND STONE BREAKER (Blake's),
Apply, stating price and condition of the machine, to Messrs. Mayor
and Daw, 69, Mark-lane, London.

WANTED, TO PURCHASE, ANY NUMBER OF NEW WHEAL LOVELL SHARES. Sellers please to state number and lowest cash price.
Address, "R. E. J.," Commercial Rooms, Bristol.

LEAD ORES WANTED, NOT CONTAINING SILVER.—
Samples to be addressed to Mr. P. GLOVER, Bank Quay Lead Works.

Warrington.

A GENTLEMAN, having a LONG and EXTENSIVE EXPERIENCE in the MANAGEMENT of MINES in CORNWALL, is OPEN to an ENGAGEMENT ABROAD as GENERAL MANAGER or SUPERINTENDENT of MINES. Unexceptionable references.

Address, "F. G. S.," Post Office, Truro.—August 20, 1867.

A GENTLEMAN, thoroughly conversant with Mining Operations and the general management and development of Mineral Properties, &c., DESIRES an APPOINTMENT as CONFIDENTIAL RESIDENT AND MANAGING AGENT. Would collect the rents and keep the general accounts of an extensive estate, and otherwise render his practical experiences advantageous to a landed proprietor requiring confidential, treatworthy aid in the management and development of his property. The highest certificates and references of ability and energy, moral integrity, &c., &c.

Address, "Fides," Mining Journal Office, 26, Fieet-street, London, E. &

S LATE QUARRYING.—A Gentleman, thoroughly conversant With State Quarry Operations, also their General Management, Machinery, Development, &c., DESIRES an APPOINTMENT as MANAGER, or CONFIDENTIAL RESIDENT and MANAGING AGENT. Would undertake the/safes and shipping of the slates, having a large connection amongst state merchants. Address, "W. S. W.," Green Edge House, Bangor, North Wales.

TO BE SOLD, a SLATE QUARRY, in CARNARVONSHIRE, opened and making profitable returns. A low price will be taken to effect an early settlement. Full particulars, and satisfactory reasons for its sail, wit be given by applying to Mr. Wal. SCOTT CALLANDER, C.E., Rhyl, North Wales

FOR SALE, TWO HIGH-PRESSURE VERTICAL PUMPING and WINDING ENGINES, suitable for SINKING TRIAL or other SHAFTS.—Apply to "E. G.," 17, High-street, Cardiff.

TO BE SOLD, CHEAP, a PORTABLE ENGINE of 14-horse power, double cylinder, of first-class construction, workmanship, and material. Winding gear to order. SECOND-HAND PORTABLES FOR SALE —Apply to Mossrs. Barbury And Carmichael, engineers, Barbury, Oxono Control of the Control of

THE FREMATOR GRANITE QUARRIES COMPANY (LIMITED).

COMPANY (LIMITED).

Incorporated under the Companies Acts, 1862 and 1867.

Capital £30,000, in 6000 shares of £5 each, fully paid-up, without further liability.

£3 per share payable on application, and £3 on allotment.

The directors and their friends are prepared to take up 2000 shares, and the allotment will take place so soon as 4000 shares have been subscribed for.

If no allotment is made the deposit-money will be returned in full.

DIRECTORS.

Colonel TINLEY, 3, Cleveland-terrace-gardens, Kensington, W. Major DOWN, Bartholomew-road, Kentish Town, N.W. HENRY KNIGHT, Eac., 56, King William-street, E.C.

HENRY KNIGHT, Esq., 56, King William-street, E.C. RICHARD MARGETSON, Esq., 3, Codrington-terrace, Kensington-park, W.

Messrs. BARNETTS, HOARES, HANBURYS, and LLOYD, 60, Lombard-stree', London, E.C. Messrs. GILLS, SONS AND CO., Tavistock.

Messrs, FREDERICK GILL and Co.

ST. CLEMENT'S HOUSE, CLEMENT'S LANE, LONDON, E.C.

ABRIDGED PROSPECTUS.

ABRIDGED PROSPECTUS.

This company is formed to work the Fremator Granite Quarries, in Cornwall, situate near Tavistock. Eminent engineers report that the granite is practically inexhaustible and of a superior quality. It has been supplied to many large Government works. The position of the quarry is unusually favourable, being connected by a railway 2½ miles long to impham Quay, where the granite can be shipped into vessels of 200 tons to all parts of the world; both railway and quay belong to the property.

The present working stock can produce 10,000 tons of granite annually, but with a small addition double that quantity can be produced. With a capital of only 20,000 tone production would be 15,000 tons, and the profits, based on the results of past transactions, would amount to 15 per cent. per annum on the outlay. The directors are negociating a contract for 120,000 tons of granite, which has been offered to them on favourable terms.

Detailed prospectures, with plans, reports, &c., can be had on application to the agents, Messrs. Prederick Gill. and Go., St. Clement's House, Clement's-lane, London, E.C., or to the secretary, at the offices of the company, where the Memorandum and Articles of Association may be inspected, and the fullest information obtained.

AT A GENERAL MEETING OF THE COAL TRADE, held

A TA GENERAL

on the 5th day of October, 1867,
JOHN STRAKER, Esq., in the chair,
The following letter from Mr. HUGH TAYLOB, resigning the office of Chairan of the Coal Trade, having been read:

"Earsdon, October 4th, 1867.

"Earsdon, October 4th, 1867.

The following letter from Mr. HUGH TAYLOB, resigning the office of Chairman of the Coal Trade, having been read:

"Earsdon, October 4th, 1867.

"Gentlemen,—Reverting to my former communication relative to my proposed retirement from the honour of Chairman of the General Coal Trade Association for the counties of Northumberland and Durham, I beg to state that, though my general health is, I am thankful to say, deemed improved, it yet continues so precarious as to render it requisite to appoint a successor, as promotive of the interests involved by our important staple production, and perhaps I may be allowed to add, as affording solace and satisfaction to my individual feelings as regards the future transactions of our trade.

"I beg leave to repeat that I feel most sensible of and grateful to the colliery proprietors and their representatives for the unvaried courtesy and support I have experienced during my connection with the executive portion of the trade, comprehending a period of 44 years, although I have only acted as Chairman during the last 23 years.

I have the honour to be, Gentlemen,
Your most obedient servant,
"To the Committee of the Coal Trade of Northumberland and Durham."

"To the Committee of the Coal Trade of Northumberland and Durham."

It was unanimously resolved, on the motion of John Clayton, Esq., seconded by Henry Thomas Monton, Esq., seconded by Henry Thomas Monton, Esq., —

"That this meeting deeply regrets the resignation by Mr. Hugh Taylor of the Chairmanship of the Coal Trade.

"That in accepting Mr. Taylor's resignation of the office, which he has filled for so many years with credit to himself and to the great advantage of the trade, they desire to place on record the high sense they entortain of the valuable services and unceasing attention of their late Chairman.

"They recall with pleasure the unvarying courtesy and ability with which Mr. Taylor presided over the meetings of the association, and the judicious manner in which, on all occasions, he conducted the business entrusted to his direction.

"They would express a hope that he may be blessed with renewed health and strength, and that in his retirement he may enjoy a full measure of that tranquility and repose which have been so justly carned by an honourable, useful, and well-spent life."

On the motion of Thomas Emerson Forster, Esq., seconded by Lindsay.

and well-spent life."

On the motion of Thomas Emerson Forster, Esq., seconded by Lindsay Wood, Esq., it was unanimously resolved:—

"That a marble bust of Mr. Taylor be placed in the rooms of the association, as a permanent mark of the respect and personal regard entertained by every member of the trade for their late Chairman."

JOHN STRAKER, Chairman. The Chairman having left the chair, the thanks of the meeting were, on the motion of Joseph Chatto Lamb, Esq., seconded by T. G. Hurst, Esq., unanimously voted to him for his conduct in the chair.

STRONG WIREWORK, the cross wires equally bent; also BEST STAMP GRATES, both of iron and copper, and punched copper plates; DITTO TUBED. All the above promptly supplied at W. ESCOTT'S MINING MATERIAL DEPOT, TAVISTOCK, DEVON.

	LE	AD (RE	S			
Date. Mines.	To			oui	nt.		Purchasers.
Sep. 30-Bronfloyd Un	ited 50		£13		6		Weston & Co.
-Clara United	20	*****			0		Mining Co. of Ireland
Oct. 4-Isle of Man M				7	6		Walker, Parker, & Co
Minera				8	6		ditto
- ditto				8	6	****	ditto
- ditto					0	****	ditto
- ditto					6		ditto
- ditto				11	0	****	ditto
5-Plynlimmon .			11		6		Runcorn Company.
-Westminster				11	0		Sims, Willyams, & Co
7-Frongoch			11	14	6		Runcorn Company.
	******* 6		16	3	6	• • • •	ditto
-East Darren .				16	6	****	Martyn Dennis & Co.
Goginan			16	2	6		Stock and Co.
			12	6	0		Burry Port Co.
9-StiperstonesFrank Mills .				17	6		Stock and Co.
	3		-	17	6		Sheldon, Bush, & Co.
10-Talargoch			13		6		Walker, Parker, & Co.
	10		13		6		ditto
-Bryn Gwiog .				16	6		ditto
-Trelogan			13	3	6		A. Eyton.
-Holywell Leve			11	14	6		ditto
-Hendre			11		6		Walker, Parker, & Co
-Sir Edward .					6		A. Eyton.
-Parrys		31/2		6	0		ditto
- North Hendre	1	0		11	6		Walker, Parker, & Co
-North Henbla		6		0	0		A. Eyton.
-Pool Park	1	5	12	15	6		Walker, Parker, & Co
-Summer Hill.		5		1	6		A. Eyton.
	1			15	0		Walker, Parker, & Co
-Mount Pleasa	nt 1:	2	10	18	6		A. Eyton.
ditto		3	14	15	0		Walker, Parker, & Co
-Dyfngwm	2	0	12	4	6		ditto
-Bwlchcoch		8	. 11	11	0		ditto
-Dyliffe	4	7	12	3	6		ditto
- ditto			12	3	6		ditto
	-	7 77 37	D F	_	-	-	
Date Mines		LEN					Thomas access
Date. Mines.	Tor		rice				Purchasers.
Oct. 4-Minera							H Southern

				BI	LEN	DE			
Date	. Mir	108.		Tons	. P	rice	per	ton.	Purchasers.
Oct.	4-Miner	A		. 50		24	7	6	Bagillt Company.
	- ditto			. 50		. 3	10	6	H. Southern.
	ditto	*****		. 55		4	4	0	Bagillt Company.
	- ditto		******	. 12		3	10	6	H. Southern.
	9—Trelog	an		.150		3	7	6	Kenrick and Son.

ARSENIC

Date. Tons. Price. Purchaser. Sept. 14—Pedn-an-drea 50 £2 13 6 Cornwall Arsenic Co.

COPPER ORES. Sampled Sept. 23, and sold at Tabb's Hotel, Redruth, Oct. 10.

Mines.	T	ons.	Pr	ice.		Mines.		18.		ice.	
Prosper Uni	ted	95	£2	16	0	Great South Tolgus.					0
		75	1	5	6	ditto				10	0
ditto	********	64	- 3	3	6	ditto	. 25			11	6
ditto		56	4	8	6	Rosewarne United .	. 49		8	19	6
ditto	********	55	0	19	0	ditto	. 46		4	1	6
			3	7	0	ditto	. 31		8	2	6
			2	0	0	North Downs				10	6
			6	16	0	ditto				0	6
			3	17	6	Crenver & Abraham.				19	0
			4	2	6	ditto				2	6
			3		0	Botallack				6	6
			9	4	ò	ditto				12	6
			5	19	6	Old Pembroke				4	6
			ĭ	12	6	Melianear				10	0
East Carn B			4	7	0	ditto				4	6
				5	6	ditto				11	0
			5	8	6	ditto					6
			4	3	0	South Dolcoath	95				0
			1	11	0	Buglehole's Ore	10				6
			5		6	ditto			-	18	6
Par Consols					6	Rosewarne Consols .				10	0
			9	10	6					10	6
			0	12	0	Huthnance's Ore	. 10		0	10	
Great South	Tolgus	40	4			,					
		5	rot		P	RODUCE.					
Prosper Uni	ted 430	£1	178	-	6	Betallack 7		. 2 .	632	rs	6
	001			10	0	Old Danshustra 61			19.00	-	49

Old Pembroke... 55
Mellanear 29
South Dolcoath... 25
Buglehole's Orc... 17
Rosewarne Con... 16
Huthnance's Orc... 10

COMPANIES BY WHOM THE ORES WERE PUBCHASED. | COMPANIES BY WHOM THE ORES WERE PUB (HASED. Names. Tons. Amount Vivian and Sons 388 £1166 2 2 866 3 Strus, Willyams, and Co. 9303 918 5 Williams, Foster, and Co. 9303 1337 9 Williams, Foster, and Co. 9303 11 1742 16 Bankart and Sons 108 569 10 Copper Miners' Company 141 504 3 Charles Lambert 55 12 7 Swectland, Tuttle, and Co. 54 361 2 Total£ 7497 18 6

Copper ores for sale at the Royal Hotel, Trurs, on Thrisday next.—Mines and Parcels.—Devon Great Consols 1831—Marke Valley 431—Gawton 313—Brookwood 284—East Caradon 220—Bedford United 150—Okel Tor 180—Prince of Wales 102—Wheal Friendship 75—Wheal Crosoft 53—Bits of Mine 31—Sortridge Consols 21—Wheal Mary Florence 18—Fursdon 11.—Total, 3710 tons.

Copper ores for sale at Tabb's Hotel, Redrath, on Thurst lay week.—Mines and Parcels.—South Caradon 475—Great North Downs 385—6 Jifford Amalgamated 307—West Damsel 183—Phonix 138—Grambler and St. A. abyn 10=1498 tons.

WATSON BROTHERS' MINING CIRCULAR.

WATSON BROTHERS, MINING AGENTS, STOCK AND SHARE DEALERS, &c. 1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

I, ST. MICHAEU'S ALLEY, CORNHILL, LONDON.

MESSRS. WATSON BROTHERS beg to notify to their friends and the public generally that Mr. W. H. CUELL has retired from the firm, in accordance with a clause in the deed of partnership; and having also sold to the remaining partners all his right, property, and interest in the business hitherto carried on by J. X. WATSON, F.G. S., NAPOLEON PREDERICK WATSON, and himself, under the business hitherto carried on by J. X. WATSON, P.G. S., NAPOLEON PREDERICK WATSON, and himself, under the business hitherto carried on the firm for 20 to the same of "WATSON and CUELL," the same will be carried on in future by Mr. J. Y. WATSON and Mr. N. F. WATSON, under the designation of "WATSON BROTHERS," and they take this opportunity to return their most sincere thanks for the great patronage bestowed and confidence their carnest endeavour to merit a continuance of both.

Messrs. WATSON BROTHERS have made arrangements for continuing their weekly Circular, which has had a large circular and the continuing their weekly Circular, which has had a large circular appear in this column. In the year 1843, when Cornish milning was almost unknown to the general pablic, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. WATSON, E.G.S., author of "Gieanings among Mines and Miners," ("Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with statistics of the Mining Interest, annually for 21 years, &c., &c., in the Compendium of a "division of small risks in several mines, ensuring success in the aggregate," and Mossrs. WATSON BROTHERS have always a selected list on hand. Perhaps at no formal risks in several mines, ensuring success in the aggregate," and Mossrs. WATSON BROTHERS have always a selected list on hand. Perhaps at no formal risks in several mines, ensuring success in the aggregate," and Mossrs. WATSON BR

or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON BROTHERS transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON BROTHERS also inform their clients and the public that they transact business in the public funds, rallway, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON BROTHERS are also daily asked their opinion of particular mines, as well as to recommend mines to invest or speculate in, and they give their advice and recommend mines to the best of their ladgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating smining.

ways equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON BROTHERS having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are able to supply shares in all the best mines at close market prices, free of all charge for commission.

to supply shares in all the best mines at close market prices, free of all charge for commission.

"INQUIRER."—In 1847, when mining was in a state of depression similar to that which it has passed through in 1867, there were only 30 dividend mines in Cornwall and Devon, and they paid in that year 185,381. In 1850 the number had increased to 42 mines, paying 213,5704.; and in 1855, 54 mines paid 340,7141, in dividends. Eleven foreign mines paid 299,3204.; Irisls, 29,6604, 340,7141, in dividends. Eleven foreign mines paid 299,3204. Irisls, 29,6604, 340,7141, in dividends, paid from mines in 1855, 297,3064, 38, 40. This was a wonderful total of dividends paid from mines in 1855, 297,3064, 38, 40. This was a wonderful advance upon 1847, when we remember everyone seemed to think mining was coming to an end; but mining "fascinates more than it deters;" and as one stroke of the pick sometimes reveals a fortune, to console for many losses and trials, it is the maxim of the miner "never to say die;" and for these reasons we shall expect to see it flourish again, and englines be as much in demand as they are now plentiful and cheap. In 1854 Wheal Buller paid 28,7604, profit, and may pay again; set Caradon paid 69124, and may pay again; and there are others might be referred to in the same way. In 1851 we had the mania for gold mining in California and Australia, and in 1852 gold mining in England, both of which distracted attention for a time from home mining. In "The Progress of Mining" for the years 1851 and 1852, the writer, it is true, as "Inquire" says, showed up gold mining in general, and entered into caiculations showing that the sum of 3,000,000. I aleast had been lost by the public in gold quarz companies, brought out by the Stock Exchange, upon the mere type discit of Yankee and other adventurers. And as our remarks for several years upon gold mining stand on record, we are now asked, and, probably, very justly, how it is that we so strongly recommend Chontales? We answer that, upon our first calling attention

Now ready, much enlarged, with Nineteen Plates (several entirely new) and numerous Woodcuts, 400 pp., price 18s. cloth (postage, 10d.),

Now ready, much enlarged, with Mineteen Plates (several nettrety in w) and numerous Woodcuts, 409 pp., price 18s. cloth (postage, 10d.),

BARLOW ON THE STRENGTH OF MATERIALS.

REVISED BY THE AUTHOR'S SONS,

P. W. BARLOW, F.R.S., Mem. Inst. C.E., and

W. H. BARLOW, F.R.S., Mem. of Council Inst. C.E.,

With numerons important addictions. Arranged and edited by

WILLIAM HUMBER, Assoc. Inst. C.E.,

Author of "Records of Modern Engineering," "Cast and Wrought Iros

Bridge Construction," &c.

London: Lockwood and Co., 7, Stationers' Hall Court.

Second Edition, price 3s. 6d. MEMOIR OF THE LATE MR. PARKIN JEFFCOCK Civil and Mining Engineer, by his Brother, the Rev. J. T. JEFFCOCK M.A., Wolstanton Vicarage, Stoke-on-Trent, with Portrait and Illustrations Crown Svo., neat cloth.
London: BEMROSE and Sons, 21, Paternoster-row and Derby.

HANDBOOK OF ABYSSINIA. Octave Volume, Price Two Shillings.

LONGMANS and Co., London. To be had of all Booksellers.

Price 1s. 6d., by post 1s. 8d.,

NOTES ON THE MINES OF THE RIO TINTO DISTRICT:
Containing a DETAILED REPORT upon the MINES and on the MEANS
of RENDERING THEM MORE PROFITABLE, as well as an ACCOUNT of the
PROCESS of TREATING POOR ORES of COPPER, successfully used there,
By JOSEPH LEE THOMAS, Assoc.I.C.E.
London: MINING JOURNAL Office, 26, Fleet-street, E.C.

In the Press, Fourth Edition, Revised and Enlarged, price 1s B R I T A I N'S M E T A L M I N E
A complete guide to their Laws, Usages, Localities, and Statistics.
By JOHN ROBERT PIKE,
Author of "Facts and Figures," and other works on the mines of
Cornwall and Devon.

12, St. Michael's-alley, Cornhill, E.C.

PATENT REGISTRATION OF DESIGNS, COPTRIGHTS, TECHNICAL TRANSLATIONS, DRAWINGS, &c.

Mr. MICHAEL HENRY,
Memb. Soc. Arts, Assoc. Soc. Engineers, Author of the "Inventors' Almanac,"
and the "Defence of the Present Patent Law,"

PATENT REGISTRATION AND COPYRIGHT AGENT AND ADVISER.
Inventors advised in relation to Patents and Inventive and Industrial Maters. Printed information sent free by post. Specifications drawn and revised. Scarches conducted. Abstracts, Cases, and Opinions drawn.

Translations of Catalogues, Trade Notices, and Circulars for the approaching Paris Exhibition. Mr. Henry has had especial experience in technical French, and in French Manufacturing and Commercial Matters.

Offices, 68, Fleet-street, E.C., London, corner of and entrance in Whiterparastreet.

MR. LEDWARD (of Chester), has FOR SALE a few SHARES in the TRELOGAN and GLEN ALUN LEAD MINES, at a small discount. An opportunity of acquiring shares in such valuable properties sel-

ANTED, TO PURCHASE, SHARES in the following MINES:—
RHOSESMOR. BRYN GWIOG.
MINERA. WESTMINSTER.

GOVERNMENT and other SECURITIES BOUGHT and SOLD at net

prices and FREE of COMMISSION.

MESSERS. WALTERHARRISON AND CO., are DEALERS for CASH or ACCOUNT in the subjoined SECURITIES, viz.:

-CONSOLS and the ENGLISH FUNDS.
Foreign funds—Brazilian, Chillan, Dutch, Egyptian, Greek, Italian, Mexican, Peruvian, Portuguese, Russian, Spanish, and Turkish.

Freference Railway Shares and Stocks, Debentures, Bonds, and ordinary Stocks and Shares in Colonial Government Securities—Canada, Cape, New Brunswick, Australian, and New Zealand. British and Foreign Mines. Docks, Insurance, Canal, Water, and Gas shares.

Mortgages and Loans negociated in all saleable or unquestionably valuable securities. Miscellancous.

ON SALE,—Government Securities paying from 6 to 8 per cent., and other properties paying from 10 to 12 and up to 15 per cent. prices and FREE of COMMISSION.

Notices to Connespondents.

A Much inconvenience having arisen in consequence of several of the Number during the past year being out of print, we recommend that the Journal should be filed on receipt: it then forms an accumulating useful work of reference.

during the pastyear being out of print, we recommend that the Journal should be filed on receipt: it then forms an accumulating useful work of reference.

IODINE.—Can any of your readers inform me where Iodine is manufactured, the names of the best manufacturers, and the present selling price?—H.

SIERRA NEVADA LAKE WATER AND MINING COMPANY.—Can any reader furnish the present name and address of the secretary, or say what has become of this concern? Its offices were at 5. Tokenhouse-yard, and at the last meeting, which took place so long since as March, 1861, there were the following names on the committee of management—Messra-Joseph Love, Francis Wedgwood, Charles Robe, Josiah Bates, Francis Horesman, and the Rev. Wm. Cooke.—T.

SOUTH HERODSPOOT.—I am exceedingly astonished at the neglected position which this mine occupies in the mining market. It seems to be quite unappreciated, and, indeed, scarcely known, although it lies in close proximity to Herodsfoof, one of the richest lead mines in the kingdom, and in the very ran of its most valuable iodes. A depth has now been attained of 86 fms., and a discovery may take place any day that will send up the shares from their present nominal value to 300. or 400. each.—A SHAREHOLDER: Aberdeen, Oct. 4.

PAND DU AND WARNLAS.—Will any reader kindly forward some particulars respecting the present state and prospects of these mines?—SUBSCHIBER.

NORTH TRESKERBY.—I was much surprised to find, at our account, on Tuesday, that our credit balance had sustained such a serious diminution, the amount now being not more than 2741, as against 7861, at the last account. I find, too, that while the August costs only are debited, the ore sold on October 2 is credited. No mention appears to have been made of the necessity of a new engine, which, it seems, must be had, and for the payment of which it is obvious a call must be made.—A SHAREHOLDER.

WHEAL TREVENA.—As the Manchester committee have issued circulars intimating their intention to nominate a fresh board for the ensuing year,

present dispute, and be conducive to the best interests of the company.—A SHAREHOLDER.
FRONTINO AND BOLIVIA.—I had hoped the well-timed letter of "A Disappointed Shareholder" would have brought forth some sort of reply from the directors. Every statement your correspondent therein made must be apparently true to every unfortunate shareholder in this most unhappy concern. Surely, the least on "trustees" can do would be to fulfil their unasked-for promiess, and acquaint us whether we are still in possession of that which we used to consider a property; because, as a shareholder in the New Granada Company (out of the shes of which, phenix-like, the present company was raised), I can well recollect Mr. Johnson, the then Chairman, informing the confiding shareholders he was sorry to inform them that the directors were not in a position to state that the mines were still in the possession of the company, for no information whatever had been received from their manager for many months—indeed, that the country was in such a turbulent condition it was impossible to conjecture what the results would be. That statement was made some six or seven years ago, since which the New Granada Company has been wound, pt. the Frontino and Bolivia Company formed, and another revolution has broken out. What I want to know is—are the present shareholders to accept the ominous reticence of their directors as a precursor of a reiterated statement by the Chairman at the next general meeting, to the effect that he is sorry to inform them that the directors are net in a position to state whether or not the company still possess the mines, as they have not heard from their manager for months past Y—AN INDIONAN'S BIARBHOLDER.

The MINING JOURNAL may be had every Sunday morning of M. L. Nicoud Bellenger, rue Rivoll, 212, Paris. Price 65 centimes. Mr. Nicoud Bellenger also supplies all English and American books and newspapers to order.

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, OCTOBER 12, 1867.

TECHNICAL EDUCATION-ROYAL SCHOOL OF MINES.

TECHNICAL EDUCATION—ROYAL SCHOOL OF MINES.

The seventeenth session of the ROYAL SCHOOL OF MINES has just commenced, and it is much to be hoped that the attention which has recently been directed to the necessity for improved technical education amongst those connected with our national industries generally will have the effect of more completely filling its lecture theatres. The professorial chairs are all filled by gentlemen of the highest scientific position; and with regard to the more important of them—Chemistry, Mining, and Applied Mechanics—it may safely be said that the professors have always been thoroughly popular with their pupils, and that their mode of teaching is well calculated to prepare the student for wheteer position in connection with mining and inpupils, and that their mode of teaching is well calculated to prepare the student for whatever position in connection with mining and industrial pursuits he may afterwards be called upon to fill. The establishment of the School took place in 1851, upon the representation of memorialists, who urged that, although the annual mineral produce of this country (it is now equal to about 40,000,0002), amounted to nearly one-half of the total amount produced by the whole of Europe, the miners and metallurgists of the United Kingdom were unable to obtain that instruction in the theory and the practice of their calling which had long been carefully provided for their foreign competitors in the mining colleges of France and other countries on the Continent, and the effect of which had, in all cases, been a marked increase in the economy, efficiency, and safety of mining operations. increase in the economy, efficiency, and safety of mining operations. It is admitted that nothing but experience in the mine and in the laboratory can confer the skill and tact requisite for the practical

It is admitted that nothing but experience in the mine and in the laboratory can confer the skill and tact requisite for the practical conduct of mining and metallurgical operations; but on the other hand, it is only by an acquaintance with scientific principles that the beginner can profit by that experience, and improve upon the processes of his predecessors. But, although the advantages derivable by students who attend the lectures is not disputed by any whose opposition is worthy of consideration, and although the encouragement offered in the shape of exhibitions, scholarships, prizes, and distinctions, is by no means small, the School is but very thinly attended, and comparatively little is heard, after they leave the School, of those who attain the position of associate.

Now, since it must be admitted that 16 years is quite long enough to ascertain the extent to which such an establishment as the Royal School of Mines is appreciated by that portion of the community for whichit was originally intended, and as it must also be admitted the School has not achieved so much success as could have been wished, the question naturally arises whether many who have heretofore considered that the curriculum was adapted solely to the wants of miners and metallurgists could not derive any great advantage from availing themselves of the resources of the School. The proposition to offer increased facilities for the acquisition of technical education seems absurd, when our chief technical school is ignored by those who were expected to support it, and has altogether proved, practically speaking a distince but it does not follow that technical education is expected. absurd, when our chief technical school is ignored by those who were expected to support it, and has altogether proved, practically speaking, a failure; but it does not follow that technical education is unnecessary, or that the Royal School of Mines is a useless establishment. The School has an able staff of competent professors, admirable lecture theatres and laboratories, and all the requisite appliances for imparting that technical education said to be so much needed, yet its students can scarcely be counted by tens, and the honour of gain ing prizes is to a great extent neutralised by the want of numbers to compete for them. How is this state of affairs to be changed in such a way as to raise the Royal School of Mines to an honourable posi-

from amongst the great educational institutions of the country?

The two great considerations with all who seek technical education, or, perhaps, it would be more accurate to say with all to whom technical education would be useful—for there are many that might technical education would be useful—for there are many that might pay the fees who, considering that education should be not an aid to but a substitute for labour, benefit neither themselves nor the schools they study in by becoming students—in judging of the relative merits of schools, are the nature of the education obtainable, and the cost at which it can be obtained. In both of these respects the Royal School of Mines offers advantages which could scarely be found elsewhere. It would be difficult to mention any of our national industrial in the scare of where. It would be diment to mention any of our mattons industries the principal of the workers connected with which would not be benefited by the possession of a sound knowledge of practical chemistry, physics, and applied mechanics, and nowhere could that knowledge be so cheaply and thoroughly acquired as in the Royal School of Mines. Nor is there anything to prevent a very large number of our industrials aspiring to the position of Associate of the School, although they may not be immediately connected with mining. The fees for those intending to take a three years' course amounts to but 20% a-year, and the instruction given would be very generally useful. During the first year the studies would embrace Chemistry, but 20% a-year, and the instruction given would be very generally on Monday last, at Masborough, of John Normansell, during a de useful. During the first year the studies would embrace Chemistry, with laboratory practice; Physics, and Mechanical Drawing; in the they were about to send 200% into Derbyshire, and that they would

second year, Mineralogy and Geology (both of much more general application in industrial pursuits other than mining than is generally supposed) would be studied, and Mechanical Drawing continued; and in the third year, which is the most-special of the three, the time of the general student would not, even under the present arrangement, be wasted; whilst by the addition of a fourth, or Industrial Division in the third year, and only possibly and the prosperity of the institution as a Technical School would be, in all probability, secured, and Organic), Assaying, and Applied Mechanics, the waste of all classes would be thoroughly supplied, and the prosperity of the institution as a Technical School would be, in all probability, secured. That the chemical lectures are adapted to the requirements of all classes of industrials, it is only necessary to refer to the syllabuses of the lectures and laboratory practice. The instruction in chemical science embraces a course of lectures on experimental chemistry, with special reference to the applications of chemistry in the arts and manufactures, and a systematic laboratory correct for the practice of chemical analysis. The course consists of 40 lectures on Mineral Chemistry, and 30 on Organic Chemistry, every one of which is calculated to be of value to the student, whatever branch of industry he may afterwards be engaged in. The general laboratory for instruction in chemical manipulation, in qualitative and quantitative analysis, and in the method of performing chemical researches, is under the direction of Dr. Frankland, and the spacious and well-furnished laboraties of the Royal College of Chemistry, which is the property of the Government, are used for the instruction of the pupils. The course of laboratory instruction commences with experimental exercises, calculated to make the student practically acquainted with the general properties of the simple substances, and of their most important compounds, and then studies those properties of bodies on which their detecti

VIOLENCE BY COLLIERY UNIONISTS.

VIOLENCE BY COLLIERY UNIONISTS.

Probably it is owing to the success which attends all determined efforts to put down the nuisance of the undue interference of Unionism with the transacting of business, and especially the success of such efforts by certain colliery proprietors, that violence is now being resorted to in South Derbyshire, and at Pontefract, to prevent colliers who are willing to work, unshackled by Unionism, from earning their bread. But from whatever motive such violence proceeds, it will utterly fail of its purpose; and the chief actors will be punished by the operation of the law, which declares the labour of every man in this country to be as free as himself.

Mr. JOHNSON, the agent for Lord CHESTERFIELD, has resolved that the operations of the collieries, of which he has the management, shall be no longer impeded by the hampering effects of Unionist interference. And he is, as the readers of the Journal are aware, supported by the proprietors of other collieries at Church Gresley, Newhall, and Swadlincote. The Unionist managers, determining to compel the coalowners to employ only members of the Union, called out those members who remained at work. Last Thursday week Mr. JOHNSON was conducting, with the aid of a few policemen, a number of non-Unionist men to work at the Bretby Colliery, when they were intercepted by one JONAS HOOPER, who is described as the secretary to the Miners' Association for the Gresley and Swadlincote district, who had the command of a gang of Unionists. Strong efforts were made to induce the latter to return, but the men were staunch, and went on towards the pit. Finding persuasion, and the offer of bribes useless, the Unionists ran on in advance and drew up in a line at the colliery gate. The officers of the law now interfered, and forced a way, but the Unionists laid hold of one of the new workmen, and, pulling him back, attempted to prevent him by physical force from going to the pit. For this offence Hoopers was, on Monday taken before the magistrates at Swadlinco

upon duty, and special constables sworn in.

Yet, more serious violence is being offered near to Pontefract. At
the Victoria Colliery, Snydale, a number of Unionists struck work
some time ago, and their places were filled by non-Unionists. These
latter have, however, had but little peace, and on Sunday night list
a conflict ensued between about 20 Unionists and non-Unionists, any
formidable weapons being used serious effects followed. Severat
men were badly injured. A man named WARD was much hurt, and
another, named SPEDDING, was dangerously wounded on the head.
Three of the rioters have been arrested.

These excesses by miners are very deeply to be regretted, inasmuch
as they not only occasion rangerous facilings between the men, but

as they not only occasion rancorous feelings between the men, as they not only occasion rancorous feelings between the men, but they also prevent that cordial understanding between masters and men which contributes so largely to the comfort of both, and are indispensable to the progress of the operatives. The employers can bear the little loss that will result from the opposition of the Unionists, aware, as they are, that, even in a business point of view, the investment will be productive, by the greater economy with which their property will be worked by men who are freed from the interference of the Unions. No one will permanently suffer but the deluded men and their families, who are blindly opposing a state of things which is inevitable. things which is inevitable.

As with the operative tailors of London, who have just been compelled to return to work unconditionally, and as it was with the colliers throughout South Staffordshire, after the last great struggle there, so also will it be in South Derbyshire: the men will have to accept their masters' terms, and at no distant date the South Yorkshire proprietors may look for the abolition of that state of third which has given the Miners' Union predominence there, and has thereby materially reduced the augment value of their property. Means the state of the s thereby materially reduced the current value of their property. Mea while the employers in South Derbyshire by the establishment of Free Labour Provident Society are showing that they desire the be interests of their men. In contradistinction to this, take the speed



and 1000l, if required, indulged in the vapid boast that they were to "fire a shot into the very midst of free labour associations, shout to "fire a shot and smash them up."

THE UTILISATION OF SMALL COAL. PRACTICAL EXPERIMENTS IN SOUTH WALES.

At the meeting of the members of the South Wales Institution of fagineers, held at Swansea in September last, a paper on this subject was to have been read by Mr. ALEXANDER BASSETT, C.E., of Gardiff, but the length of the discussions in connection with the preging papers precluded that, as well as several others, from being submitted to the meeting. Since that time a quantity of fuel has been made at Aberaman, near Aberdare, by Mr. BASSETT, for the payell's Duffryn Steam-Coal Company, from the small coal produced from the various seams in the Aberdare district, and has been used

peell's Duffryn Steam-Coal Company, from the small coal produced from the various seams in the Aberdare district, and has been used with very great success in some of the locomotives in that district, in Sept. 19 and 20 some important and interesting experiments were arried out on the Taff Vale Railway, by the permission of Mr. Fisher, C.E., under the superintendence of Mr. Tominson, the locomotive sperimendent, who made all the arrangements for thoroughly testing the value of the fuel.

We are informed by Mr. Bassett that on Sept. 19 the engine made iso trips from Cardiff to Aberdare and back, working over 100 miles, seclusive of shunting. The average gradient against the load being in 309; the average load throughout the day was 488 tons. The fall used, which was made from a slightly bituminous steam-coal, spresented 50-12 lbs. per inch, but if the weight of the engine and under, together with the time occupied in shunting, be taken into consideration, then the quantity used per train mile was equivalent to 4059 lbs., or '077 lbs. of fuel used to the ton carried. The quantity of water evaporated during the day was 8:1 lbs. for each 1 lb. of fuel sed. On the following day's experiments the same engine worked over the same gradients and distance, the average load throughout heady being 52! tons, the quantity of fuel used being 50:63 lbs. per mile, but if the weight of the engine and tender be taken into consideration, together with the time occupied in shunting, the consention of fuel was 41:7 lbs. per train mile, or '073 lbs. of fuel to seh ton carried. The quantity of water evaporated was 9:14 lbs. to seh 1lb. of fuel used. The engine in every journey travelled at the paximum speed allowed on the line for mineral trains, and the paximum speed allowed on the line for mineral trains, and the paximum speed allowed on the line for mineral trains, and the paximum speed allowed on the line for mineral trains, and the paximum speed allowed on the line for mineral trains, and the paximum speed allowed to the ton corr

pressure of steam was abundant.

A series of very careful experiments were made in 1858 by Mr. [OMLINSON on the evaporative power of the Aberdare and Rhondda ogals, by which it appeared that the highest duty obtained was 8.63 lbs. of water, evaporated by 1 lb. of coal; the average of 34 experiments leing 7.90 lbs. of water evaporated per 1 lb. of coal. It will be seen that the results of September 20 were superior to those of the previous day; this undoubtedly arose from the experience obtained in using the fuel to greater advantage. Mr. BASETT considers that had there ken sufficient fuel left to have continued the experiments for another day, a further increased duty would have been obtained.

The fuel used in these experiments was not waterproofed, but the fondon Patent Coal Company have manufactured a large quantity

as-ral of

ex-

en-

efit ire,

ned ion-

ning s, it shed man

that

supom-l out Mr.

were trict.

line and men, force

nday ng of of an

th in who

Quar-ealed

These

rs and re inrs can
Jnionw, the which interhe deate of

r comhe colruggle
ave to
Yorkthings
ad has
Meant of a
he hest
peech,
g a dewould

Indon Patent Coal Company have manufactured a large quantity impervious to moisture, and this can be thoroughly and efficiently done at a small cost. We are informed that Mr. Tomlinson has ex-Imperious to moisture, and this can be thoroughly and efficiently done at a small cost. We are informed that Mr. TOMLINSON has expressed a very decided opinion on the importance of waterproofing the full required for locomotive purposes. In all probability Mr. Bassert's paper on this subject will be printed, and a copy sent to each member previous to the next meeting of the South Wales Institution of Engineers, in which the details of the experiments made both on the Taff Vale Railway and the Monmouthshire Railway will be given, together with Mr. TOMLINSON'S report; also, the results of a series of experiments to prove the value of the fuel for domestic purposes. The estimated cost of converting the small coal into fuel of the same daracter as that used in the trials, but exclusive of the royalty, will le from 2s. 4d. to 2s. 6d. per ton.

THE CHAIRMANSHIP OF THE NORTHERN COAL TRADE.

The CHAIRMANSHIP OF THE NORTHERN COAL TRADE. The resignation of Mr. HUGH TAYLOR from the Chairmanship of the General Coal Trade Association for the counties of Northumberland and Durham, has been received with much regret, and at the meeting of the Coal Trade, on Saturday, resolutions recognising his great services to the trade, and ordering a marble bust as a permanum mark of respect to be placed in the Association's rooms, were manimously passed. Mr. TAYLOR had been connected with the concil of the coal trade for 44 years, and for nearly a quarter of a entary has occupied the position of Chairman. The remarks of Mr. JOHN CLAYTON, at the meeting referred to, well express the feeling of the members of the trade generally. In moving the resolution agressing the respect of the Association, he observed that Mr. TAYLOR had represented very great interests in the county, and he had, therefore, possessed great power; but he had wielded that power in a manier consistent with the most enlightened views, and in every way sited to advance no less the general prosperity of the district than the interests of those he represented. They had considerable experisece of Mr. TAYLOR. They had seen his able and judicious manageneat of the affairs of the coal trade for many years. No one who had seen Mr. TAYLOR in the discharge of the duties of his office but must feel the greatest respect for him. Not only had he conducted the business in an able manner, but his kind disposition and concilatory course of action had acquired for him a degree of personal influence which it had been the privilege of very few persons to athic. He really felt considerable pain in separating from him. Uder his auspices the coal trade of Northumberland and Durham had maintained its high position at the head of the coal trade of the word. Mr. TAYLOR had lived to see it attain a state of prosperity manner, and as a Chairman most efficient.

UNION AND CO-OPERATION IN THE IRON TRADE. The resignation of Mr. HUGH TAYLOR from the Chairmanship of

UNION AND CO-OPERATION IN THE IRON TRADE.

Witon AND CO-OPERATION IN THE IRON TRADE.

Movements of an opposite character which are taking place amongst spratives engaged in the manufacture of iron call for notice. A lettight ago what is termed amongst a certain class of people a de-monstration came off in South Staffordshire. It was inaugurated by the executive of the Ironworkers' Association of that part of the tingdom, and it seemed to have a threefold object—(1) to stimute the ironworkers of the district to renewed interest in Unionism; (2) to stimute the ironworkers of the Unionists in Sheffield and Manchester; and the district to renewed interest in Unionism; (2) to stimute the ironworkers of the Unionists in Sheffield and Manchester; and the district the excesses of the Unionists in Sheffield and Manchester; and the distribution of the North and the South of England respectively. The Combination was broken up by the last great struggle between the emgyers and the employed in the iron trade of this county; and since that he there has been little or no cohesion between the different societies forming in respective Unions. Nevertheless, paid officers have been supported.

the capity of the tron trade of this county; and since that give and the capity of the tron trade of this county; and since that give and the capity of the trong of the capity of the c

shaken by the mismanagement, a meeting was held in Darlington, on Monday, to which the public were invited, and at which reverend and other gentlemen, with also a representative of a co-operative concern in Yorkshire, were the speakers. As might have been expected, confidence was expressed in the successful future of the concern, and the announcement of this result is followed with the little business statement that "it is expected that now its affairs have got into better order the shares will be taken up, and the works successfully carried forward." Mayhap, they will. But, whether they prove successful or not, every ironmaster will rejoice that the scheme is likely to get under weigh. It would be a further cause of satisfaction to the trade if a similar undertaking should be started in the South. The men would then be better able to appreciate what are the difficulties which surround the carrying on of a mill and forge; and they would thereby be less prompt in using their coubinations to harrass their employers, by striking for wages which cannot be given, and thereby diminish the fund out of which wages are supplied. We are not prepared to say that the efforts of the few remaining Southern Unionists to restore the confederation between the North and South were due to the certainty which seems looming, that unless such a confederation takes place, the Southern Union, whatever may become of the North, must soon cease to exist; but it is somewhat suggestive that at the demonstration a resolution should have been passed, desiring a confederation, without conditions as to the focality where the executive shall sit, and with this reservation only; that the form where here have been passed, desiring a confederation, without conditions as to the focality where the executive shall sit, and with this reservation only; that the form workers know it. They may weil be congratulated that, knowing it, they seem to have come to the determination that no more of that for which they have so labortously toiled shall be thus sq

A NEW JOINT-STOCK IRON COMPANY.

A NEW JOINT-STOCK IRON COMPANY.

One of the largest blast-furnace and colliery concerns in South Staffordshire is that which is known as the Parkfield Iron Company. The works consist of five blast-furnaces, one of them of very large dimensions, and upwards of 240 acres of collieries. With comparatively slight exceptions, all the coal and stone used is mined on the estate, out of which, notwithstanding that it was regarded as worked out when it was taken to, a million tons of coal have been obtained since it has been in the possession of the existing proprietary, and it is believed another million will yet be got. The concern was started by a gentleman of great experience in South Staffordshire, who also subsequently carried on some works in South Wales, Mr. E. B. DIMMACK. Recently, Mr. DIMMACK handed over the Parkfield estate to his son-in-law, Mr. HENRY MARTEN, a civil engineer of much ability, and by him, Mr. DIMMACK residing with him, the works have been continued. During the past week or two negociations have been on foot for the making of the concern into a joint-stock company, upon the limited liability principle. Those negociations are now completed, and on Thursday the deed was scaled. Mr. MARTEN has let the property to a respectable and influential company for a certain number of years. The terms of the lease are favourable to both sides, and Mr. MARTEN, who has been connected with the estate ten years, will be retained as manager, and Mr. DIMMACK will be be upon the board. Arrangements have been made for the discharge of all existing liabilities, and there is every prospect of the concern being carried on, not only with energy, but also with success. It is be upon the board. Arrangements have been made for the discharge of all existing liabilities, and there is every prospect of the concern being carried on, not only with energy, but also with success. It is not improbable that steel on an entirely new process will be manufactured by the new company, which has been formed without any

MINING AND METALLURGICAL PRODUCTS AT THE FRENCH EX-HIBITION.—In the Supplement to this day's Journal will be found the very valuable and elaborate Report of Prof. Warington Smyth, prepared for the Committee of the Council of Education, upon the Mining and Metallurgical Products at the French Exhibition. It is unnecessary to state that the report contains an enormous amount of valuable information upon the subject, since the fact of its being prepared by Prof. SMYTH is an ample guarantee in that respect; but it may be mentioned that he has taken especial care to make the report interesting as well as useful, by referring to the several branches of the subject under distinct heads, and thus enabling the reader to see at a glance the progress which has been made in, and the relative merits of the mechanical contrivances employed in each country.

STEEL FROM COMMON IRON .- Practical men are still investigating STEEL FROM COMMON IRON.—Practical men are still investigating this matter, one to which attention was drawn in the Journal some time ago: and they express every confidence in its practicability. The most recent experiments go to the belief that it will be possible to make good rails of it, and to roll them direct from the converter without the intervention of the puddler, the steel having been conveyed to the converter in a fluid state from the furnace in which the ore has been smalled. The experimentary go further, they halfveyed to the converter in a fluid state from the furnace in which the ore has been smelted. The experimentors go further; they believe in the practicability of rolling other kinds of articles—articles requiring more manipulation than rails—also direct from the converter. Machinery has, however, to be completed, and patent rights have to be adjusted; but no serious obstacles are being imposed on the other hand. In a short time the experiments and arrangements will be so far completed that we are assured will lead to practical results of a most grafting character. most gratifying character.

most gratifying character.

RAILWAY AFFAIRS IN SPAIN.—It is to be feared that the Belgian metallurgists who accepted obligations for work and labour done by them for Spanish lines will find themselves grievously disappointed by the financial results which they have entailed upon themselves in consequence. A most important announcement has been made this week—that the Northern of Spain Railway Company has been compelled to suspend payment of the interest which became due upon its obligations on Oct. 1, the suspension taking place for the best of all reasons—because the insufficiency of the traffic, and the heavy interest payable on the large floating debt due to the Spanish Crédit Mobilier, deprive the directors of sufficient funds with which to meet the company's liabilities. The company is the second large railway undertaking in Spain, and great rejoicings took place when it was opened throughout for traffic early in the autumn of 1863. In four short years this unfortunate line—which is a fair representative of most of the railway enterprises of Spain—has involved those associated with it in disaster and disappointment.

Leases of Crown Mines—inconsequence of the Commissioners

Leases of Crown Mines.—In consequence of the Commissioners of Woods and Forests requiring that in all future licenses or leases granted by them a clause shall be inserted, providing that if the licensee or leases sell or otherwise dispose of the mine, or quarry, granted one-fourth of the consideration received shall be paid to the Crown (deducting only from the full purchase-money the actual cost incurred), a meeting was held at Douglas, Isle of Man, on Saturday (Mr. Chas. Tetley in the chair), to consider what steps should be taken in the matter. It appears to be admitted that the clause is not objectionable, except in the case of renewals, and it seems that, except in Mr. Tetley's case, the Commissioners have in every instance consented to withdraw the clause where the licence or lease is simply a renewal of one-previously existing without it. The clause will be advantageous in ordinary cases, since its obvious tendency is to prevent fabulous prices being put upon mining properties, and thus protect the public. Of course, a vendor can, as heretofore, sell his rights for one-third of the company's capital, although it may be worth but one-tenth the amount demanded, but he must pay the penalty for doing so—thus, assuming it is desired that a mine worth 4000. be sold for 40,007, to a company with a nominal capital of 120,000. It can be so sold; but in such as that one-fourth must be paid in cash before the lease can be transferred, the vendor and his friends are compelled to pay 10,000. for the one-third share of a property worth 4000.—an arrangement which but few vendors or promoters will be filled to encourage legitimate speculation, and to render fraudulent speculation unprofitable. The result of the meeting was that no action was taked with regard to new leases, but to endeavour to secure the continuance of the same terms in renewals of existing leases. Mosers, Stevakar and Bawdens were appointed a committee to call upon the principal shareholders in the various mining companies, for the purpose of securing

DISCOVERY OF A NEW ORE IN THE ISLE OF MAN.—The Foxdale Mine, in the Isle of Man, is already one of the richest lead and silver mines in Great Britain; but its value has been very much increased by the discovery of an ore hitherto unknown to exist in the Isle of Man. The name of the ore is "Fablez" ('tetrahedrite). It yields an immense amount of silver, and practical miners say that when this ore is found in a mine it is increasing in value as it gets deeper. The principal place where the ore is found its the Hartz mountains. The Fahlerz of the Foxdale mines is found to exhibit the same tendency to become coated with copper pyrites that is elsewhere observable, and the gangues accompanying it, spathose iron and quartz, are all similar. During the past year lead and copper ores to the value of 33,4754, have been raised at this mine. The cost of labour, materials, &c., was 29,416; and dividends to the amount of 56001, have been paid to the shareholders.

IMPROVED PUMP-BUCKET:—Mr. JACOR RIBD of Browhomenet.

IMPROVED PUMP-BUCKET,-Mr. JACOB BIRD, of Bromborough. IMPROVED TUMP-BUCKET,—AIT. JACOB BIRD, OF BYOIDDOUGH, Cheshire, exhibited a new air pump-bucket, in which he claims that the friction is greatly reduced, and a better vacuum obtained. The perforated cover is raised as the bucket descends, and raises with it a cylindrical wedge-shaped spring, which loosens the metallic packing, and leaves the bucket free from friction against the sides of the pump. In the ascent of the bucket the perforated cover is forced downwards, and carries with it the wedge-formed spring, forcing it

between the metallic packing and the ring of the bucket. The metallic packing is thus forced against the side of the pump at the moment it is required to lift the fluid. There is, therefore, no friction against the sides of the pump in the down-stroke, and only sufficient in the up-stroke to render the bucket tight.

REPORT FROM NORTHUMBERLAND AND DURHAM.

REPORT FROM NORTHUMBERLAND AND DURHAM.

Oct. 10.—The Coal and Coke Trades continue, on the whole, good, but the general state of the Iron and other trades are not, it must be confessed, improving so rapidly as was expected a short time ago. Iron shipbuilding, however, at Jarrow and other places does improve, and many orders for vessels of various kinds have been received.

A notable circumstance connected with the Coal Trade is the final retirement of Mr. Hugh Taylor from his office of Chairman of the Coal Trade Association of these two counties, which he has long held with great credit to himself, and the advantage of the trade generally. This step has been compelled by declining health, and much regret is expressed in consequence. Mr. Taylor has been intimately connected with the trade upwards of 40 years as mining engineer, manager, &c. He was at one time mining engineer for the Duke of Northumberland, and afterwards held a most important office as chief commissioner for the same nobleman. A meeting was held at the Coal Trade Office in Newcastle, on Saturday, when the chair was occupied by Mr. John Straker. Mr. John Clayton moved:—

"That this meeting deeply regrets the resignation by Mr. H. Taylor of the chairmanship of the Coal Trade that in account of the Taylor."

"That this meeting deeply regrets the resignation by Mr. H. Taylor of the chairmanship of the Coal Trade, that in accepting the resignation of Mr. Taylor, which he has filled so many years, they desire to place on record the high sense they entertain of the valuable services and unceasing attention of their late Chairman," &c.

This resolution was seconded by Mr. H. T. Morton, and carried unanimously. Mr. T. E. Forster proposed the next resolution:—

"That a marble bust of Mr. Taylor be placed in the rooms of the association as a permanent mark of the respect and personal regard entertained by every member of the trade for him."

as a permaneut mark of the respect and personal regard entertained by every member of the trade for him."

Mr. Lindsay Wood seconded this resolution, which was unanimously adopted. This will certainly prove a most grateful remark of respect to Mr. Taylor in his lifetime. The Taylor family have during many years occupied a very high position in the mining and commercial world here, the late T. J. Taylor, nephew of Mr. H. Taylor, being one of the most eminent scientific mining engineers of this country.

On Thursday an interesting excursion to the Ryhope Colliery was made by the captain and officers of the French corvette, Limier. The company were conveyed by special train to the colliery, and descended the workings. It was intended that the visit below should not occupy more than an hour, but so interested were the visitors with what they saw, that an exploration of the interior of the mine was determined on, and two hours were spent away from daylight. Many of the explorers hewed for themselves pieces of coal, which they carried away as mementoes of their visit. They reached the upper world again at half-past 3 o'clock, and, having restored themselves to their former appearance, adjourned to the schoolroom, where a champagne luncheon, provided by the owners of the colliery, and supplied by Mr. Shlei, of the Queen's, was spread. An inscription in the room welcomed the visitors to Ryhope. The chair was occupied by Councilior John Nicholson, one of the owners, and the vice-chair by Mr. William Taylor. After the usual loyal toasts of the Queen, the Emperor, Empress, and Prince Imperial of France, the Chairman proposed the healths of Capt. Bruat and officers of the Limier. He said it afforded him great pleasure to see the French officers that day at Ryhope, and, after their visit to the workings, he was satisfied they would leave Sunderland with the impression that the works that they had that day inspected were not equalled in the whole of England. The return train stopped at the Londonderry station, from whence th

the visitors were very much pleased.

At the Northern Institute of Mining Engineers meeting, on Saturday, there was a large attendance of members, the chair being occupied by the president, Mr. T. E. Forster, and among those present were Mr. Atkinson and Mr. Lionel Brough, Government Inspectors. The first business before the meeting was the election of several new members. The subject of the purchase of a site for the erection of a new hall was then introduced, and it appears that the committee appointed to manage this part of the business have made important progress, and the whole subject will be shortly laid before a special meeting. As the number of members continue to increase most rapidly a larger hall and more commodicus premises are an imperative necessity.

The discussion of the important paper of Mr. Waller on "Pumping" was then taken, and it proved most interesting.

A short paper was read by Mr. Stephenson on "Lifting Water by means of Tubs and Winding Engines," and a comparison given as to those different modes of lifting water. Further particulars as to pumping were also given by Mr. Waller, so that the whole of the papers, including those of Mr. Stephenson and Mr. Waller, and the discussion thereon will prove a valuable addition to the "Transactions" of the Institute.

A paper was read by the Secretary on a "New and Ingenious Mode of applying the Water Gaugo," which has been adopted by Mr. Daglish. The paper was contributed by Mr. Daglish, and, in his absence, read by the secretary. The object of this application of the water gauge is to include the shaft resistance in its indications, which is not the case with the ordinary gaugo, the latter only giving the resistance met with by the air in traversing the air-channels of the mine. For particulars as to the mode of effecting this object we must refer to the paper, and here we may remark that the "Transactions" of the year, so far, possess much interest.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Oct. 10.—The quarterly meetings of the Iron Trade of South Staffordshire have been held this week. The meeting at Wolverhampton, yesterday ,was thinly attended, but to-day at Birmingham the Town Hall was occupied by a numerous gathering. There have been considerable sales of pig-iron, but the talk of an advance in price has proved to be without foundation. The general tenor of the opinions of the leading men connected with the trade is that the demand for manufactured iron is rather quieter. We are entering on what is usually the dullest quarter of the year, and some reaction from the undoubted improvement since midsummer is not improbable. It is, perhaps, about a fair estimate that the works in the South Staffordshire district are turning out from two-thirds to three-fourths of their shire district are turning out from two-thirds to three-fourths of their full production. United States orders are rather slack, but there is a fair demand for India. The trade naturally fluctuates a good deal. On the one hand, there are no stocks, and on the other, the works not full production. On the one hand, there are no stocks, and on the other, the works not being fully employed, orders given out are promptly executed, hence there is but a very small reserve in hand to keep the trade steady. Considering the general distrust, which checks all commercial ventures, the Iron Trade cannot be considered to be in an unsatisfactory position. There is naturally a disposition to look with unusual scrutiny at the paper taken either by sellers or by the banks. Considering, however, the long continuance of the depression, and the fact of two important local banks having shut at Birmingham, the limited extent of the failures in South Staffordshire and Birmingham affords good grounds for congratulation, and it may be hoped that, while no extent of the failures in South Staffordshire and Birmingham affords good grounds for congratulation, and it may be hoped that, while no doubt there are still weak firms, they are fewer than was the case some years ago. The Hardware Trades of Birmingham and of South Staffordshire continue dull, and perhaps the gun trade is almost the only branch in which activity prevails. The demand is, however, not worse, and is, perhaps, rather better, if anything, than it was a fortnight ago, but the workmen are not fully employed. The manufacturers of cast hollow wares and common locks are, probably, as much depressed as any branches. It is, however, not improbable that the moderate, but safe, trade doing this year will be as profitable as the much larger pusiness of 1866, when profits were diministrative and the safe, trade doing this year will be the work in the moderate. able as the much larger business of 1866, when profits

nished by bad debts.

The exceptional activity of the gun trade noticed above, is confirmed by the fact that Mr. Tranter, an established maker in Birmingham, is erecting an extensive factory near that town for the promingham, is crecting an extensive factory near that town for the production of guns and pistols by machinery. These works cover a space of four acres, and are constructed on a similar principle to those of the Government at Enfield. Mr. Tranter has already commenced the manufacture of Chassepot rifles for the French Government at a part of the works sufficiently advanced for occupation, and it is calculated that when in full operation they will be able to turn out 1000 rifles per week. In connection with the same destructive branch of manufacture, it may be mentioned that Messrs, Deakin and Johnson, patentees of the new method of producing steel barrels by punching and rolling, have removed their manufacture to the Albion Works. and rolling, have removed their manufacture to the Albion Works.

near West Bromwich, where they are carrying on operations on a more extensive scale. They make steel tubes for machinery as well as rifles, and the invention is, apparently, capable of wide application.

It is stated that the Parkfield Ironworks, which consist of five blast-furnaces, and ironstone and coal mines, are passing into the hands of a limited company, but that Mr. H. Marten, the former proprietor, is to continue to manage them. is to continue to manage them. It is anticipated that the manufac-ture of Bessemer steel may be carried on at these works. The lock-out of miners in South Derbyshire by the masters, with

the view to avoid employing men connected with the Union, is still

n operation. The Union has issued an address exhorting the South Staffordshire miners not to take work of which they themselves have been deprived, and it appears, are resorting to extremer measures. On Monday, Mr. Jonas Hooper, secretary to the Miners' Association for the Gresley and Swad-lincota district, was charged with intimidating a man named Marsden, at the Bretby Colliery. It appeared that Marsden was one of a number of men whom Mr. Johnson, agent for Lord Chesterfield, had engaged to work at Bretby Collery, and, on the morning in question, was proceeding to the pit with others, when he was met by a gang of Unionists, under the command of Hooper. They attempted to persuade and bribe them to give up their work, but the strangers resolutely refused, when the Unionists ran for the gate leading to the colliery, and there drew up in line, to prevent the men from entering the colliery road. The police here interfered, and it was then that force was used to keep Marsden back. The magistrates were satisfied that all this was done by the instructions of Hooper, and convicted him, and ordered him to be imprisoned and kept to hard labour in Derby Gaol for one month. Mr. Waluwright, who appeared to the prisoner, gave notice of appeal, and the prisoner was liberated on finding sureties for his appearance at the Derbyshire Quarter Sessions, on the 15th hist. Extra police precautions are taken in the district to preserve the peace.

The last of the three men injured by the bursting of a tuyere in a blast-furnace at Millfield, near Bilston, died on Friday. The evidence given at the inquest on the other two sufferers was read over to the Jury. One of that body pressed for the adjournment of the inquest, with a view to the production of evidence which might lead to the discovery of the cause of these dead and the frequent accidents; and another juror said it was a very hard case for men to be killed, and that nothing could be done to prevent a recurrence of the cause of their death. The coroner, with several of the juror The Union has issued an address exhorting the South

REPORT FROM MONMOUTH AND SOUTH WALES.

REPORT FROM MONMOUTH AND SOUTH WALES,
OCT. 10.—The Iron Trade is generally quiet during the time intervening between the Preliminary Meetings and Quarterly Meetings, and buyers have no disposition to give out orders, beyond what are actually requisite. Hopes, however, are entertained by ironmasters that the new quarter will bring about a state of things long hoped for. As yet the improvement which was anticipated cannot be said to have set in, as the hands at some of the principal works are still consider time, but the depression has been so long and so sowere that to have set in, as the hands at some of the principal works are still on short time, but the depression has been so long and so severe that anything like a restoration to former activity cannot be expected to take place at once. It is generally believed by those competent of forming an opinion that the worst period has been passed, and that the trade will gradually assume a healthy and satisfactory state, as there are so many circumstances which lead to the expectation of a good business being shortly done, especially the continued remarkable resistance of the money market, and the very large amount of conital business being shortly done, especially the continued remarkable easiness of the money market, and the very large amount of capital waiting for investment, both of which will very materially facilitate any movement which may take place in the right direction, and aid the bringing about of a more encouraging condition of business generally. The advices from the United States continue to be of a very satisfactory character, and there is every probability that the demand will increase, and especially for railway iron. Enquiries from India are increasing, and it is hoped that the orders from that country will soon show a considerable extension. From the Continent there is no alteration to note. The Russian contracts for rails are not yet completed, but by the end of the present month it is expected that there will not be many uncompleted, and the rail-mills will then have to be kept going chiefly with American and the rail-mills will then completed, but by the end of the present month it is expected that there will not be many uncompleted, and the rail-mills will then have to be kept going chiefly with American and home orders. In the home trade the demand for the various railways is still very moderate, and from such it would appear that public confidence has not yet been sufficiently restored as to enable the directors to launch out into extensive repairs, although it is well known that several of the lines require re-laying very badly, especially where the traffic is heaviest. However, a few orders have been given out, and it is now generally expected that in this department a good, steady trade will-be done throughout the remainder of the year. For the miscellane-ous descriptions purchases continue to be made a little more freely. ous descriptions purchases continue to be made a little more freely. Quotations for pig-iron are well maintained, and no difficulty is experienced in effecting sales. For Tin-Plates the demand continues good, and, as a rule, the works are fully employed, and there are no stocks in the hands of makers. At the quarterly meeting it was manimously resolved to adhere to the old price list, and the prospects of the trade generally are said to be of a hopeful character.

Considerable activity is being evinced in the shipment of Steam Coal to the foreign markets, and the trade may now be said to have assumed something approaching a satisfactory position, and it is to be hoped that such a desirable state of affairs will long continue. The demand from the Continent is about the average, and the same way he said of the mail packet station, for which places there is a

The demand from the Continent is about the average, and the same may be said of the mail packet station, for which places there is a probability of large quantities being required, more especially if the Abyssinian expedition extends over any lengthened period. For house qualities there is a tolerably fair coasting demand. It cannot be said that anything like activity prevails, but the house qualities there is a tolerably fair coasting demand. It cannot be said that anything like activity prevails, but the cold weather, which has set in somewhat carlier than usual, will probably exercise a salutary influence on the demand.

From trustworthy information we learn that negociations are in

From trustworthy information we learn that negociations are in progress for the sale of the Blaina Works, and there is every probability that they will be brought to a successful issue. At present Blaina presents a lamentable aspect, houses being gradually vacated, and the once busy works are at a complete standstill, gloomy stillness being everywhere observable, where a few months ago hundreds—nay, thousands—of hands were in full employ. Should the purenase be completed there is little doubt that steps will be immediately taken to start a portion of the works, and thus keep as many of the old hands together as possible, for at an ironworks it is always of the first importance to secure men who are skilled in the several branches of the manufacture.

TRADE OF THE SOUTH WALES PORTS.—During the month of September the exports of coal from Newport reached 27,773 tons, as compared with 25,585 tons in August, and 29,487 tons in the corresponding month of last year. To the mail packet station a rather large quantity was sent, as the Abyssinian expedition brought about a considerable increase in the demand. Coatwise the shipments were 66,160 tons, against 80,084 tons in the previous month, and 49,218 tons in September, 1865. Now that colder weather has set in an impets is expected to be given to both the coasting and local consumption of house coals. Swansea exported 5106 tons, as compared with 46,881 tons in August, and 44,004 tons in the corresponding month of last year; and the shipments coastwise were 23,184 tons, against 32,630 tons in the previous month, and 18,936 tons in September, 1866. Cardiff exported 18,1514 tons, as compared with 188,356 tons in September, and 161,720 tons in the corresponding month of last year; and the shipments coastwise were 70,899 tons, as compared with 184,320 tons in the previous month, and 18,950 tons in September, 1866. From Lianelly the exports were 10,926 tons, as compared with 15,462 tons in August, and 5734 tons ports were 10,926 tons, as compared with 15,462 tons in August, and 5734 tons ports were 10,926 tons, as compared with 15,462 tons in August, and 5734 tons ports were 10,926 tons, as compared with 18,463 tons in September, 1866. The clearances of Iron were large, the exports from Newport reaching no less than 17,878 tons; Cardiff exported 12,128 tons of fron, and 6180 tons of patent fuel; and Swansea exported 31 tons of Iron, and 6180 tons of patent fuel; and Swansea exported 31 tons of Iron, and 6180 tons of patent fuel; and Swansea exported 31 tons of Iron, and 6180 tons of patent fuel; and Swansea exported 31 tons of Iron, and 6180 tons of patent fuel; and Swansea exported 31 tons of Iron, and 6180 tons of patent fuel; and Swansea exported 31 tons of Iron, and 6180 tons of patent fuel; and Swansea exported 31 to TRADE OF THE SOUTH WALES PORTS. - During the month

POBEST OF DEAN.—An unusually large number of applications have been made to Her Majesty's gavelier for the district for gales. Mr. Samuel Morgan, of the Folly, Parkend, for an iron mine at Oakwood Bottom. Richard White, of Clinderford, for an iron mine gale, or to sink below the coal of his pit to any depth required. Edward Baidwin, of Bream, and George Burgham, of Whiteeroft, for an iron mine gale at Middleridge. Cornelius Bonnett, of Whiteeroft, for an iron mine gale at Middleridge. Cornelius Bonnett, of Whiteeroft, for an iron mine gale at Middleridge. Cornelius Bonnett, of Whiteeroft, by Middleridge. Cornelius Bonnett, of Whiteeroft, for an iron mine gale at Middleridge. Cornelius Bonnett, of Sandy's works at Lightmoor. William Adams, of Pillowell, for an iron mine at shay's works at Lightmoor. William Adams, of Pillowell, for an iron mine at Murbrook Ditch, near the Forest of Dean Rallway. Edward Baidwin, of Bream Murbrook Ditch, near the Forest of Dean Rallway. Edward Baidwin, of Bream Murbrook Drybrook, for a coal mine, situate near Skinner's Garden Collery, under Russell's enclosure. Frederick Morse, of Yorkicy, and George Matthews, of Drybrook, for a coal mine between Moseley Green and the Speech Matthews, of Drybrook, for a coal mine between Moseley Green and the Speech House, and within the limits of the New Fancy Colliery. They have also galed to a grant of all the unallotted veins between Morgan's Folly No. 3, piled for a grant of all the unallotted veins between Morgan's Folly No. 3, James Billy, of Bream, has also made application for a coal mine near Parkend Church, in the centre of the coal basin. In the case of the first-named seven Applicants they propose to work by means of pits, and that portions or all the veins of iron ore will be worked in this way, and so also with regard to the other applicants they propose to work by means of pits, and that portions or all the veins of iron ore will be worked in this way, and so also with regard to the other applicants for coal mines. The whole of the FOREST OF DEAN .-- An unusually large number of applications

same animated character. The monthly returns of the Bullo Pill branch, and the Severn and Wye Railways, are much the same as those of the preceding month. As the winter draws nigh it is expected that great demands will be made for the better qualities of household coal. To how much greater extent any pressure can be put upon the coal works of the district is a matter which time alone can tell. It will be well for the coal owners to exercise more than ordinary care with regard to the protection of the lives of those under their employ. Colliery accidents are exceedingly rife in the Forest of Dean, and whilst during the earlier months of the year few accidents of a fatal character occurred, the last few months have been especially associated with accidents resulting from insecure raofing. A painful accident has again happened at the Howbeach Level, near Moseley, to a father and son named Hawkins. In the former case death put an end to his anferrings, which continued from Monday evening until Wednesday morning. They were working together, when some rock fell upon them. The lad was also sortously injured.

The Tin Trade manifests the same briskness that has shown itself in this department for the past three months. The summer just closed has been

In this department for the past three months. The summer just closed has be altogether one of the busiest remembered for years in this branch in the For of Dean; indeed, in all branches of forest trade there has been no scarcity orders, which means no scarcity of labour.

REPORT FROM SCOTLAND.

Oct. 9.—There has been a pretty fair business done in our Pig-Iron market this week, and prices have, if anything, an upward tendency. The shipments for the week were 10,325 tons, compared with 9445 tons in the corresponding period of 1866; and Messrs. Swan Brothers give the following particulars as to stocks in store, deliveries, &c., for the nine months ending September 30:—

The largest quantity of pig-iron in store was on May 16, 1866, (say) 537,668 tons, so that this date it has been reduced 307,945 tons. According to arrangements on June 26, the makers blow three-fourths, instead of two-thirds, of the furnaces, up till Dec, 31, 1867, (say) 115 as a maximum.

ments on June 26, the makers blow three-fourths, instead of two-thirds, of the furnaces, up till Dec, 31, 1867, (say) 115 as a maximum.

At this day's market there was considerable improvement, and a large business was done at 54s, 4½d, to 54s, 7½d, cash, and 54s, 6d, to 54s, 9d, a month, closing with a still further upward tendency. Buyers at top prices, sellers 1½d, a ton more. No. 1, f.m.b., 55s, 6d.; No. 3, 54s, 6d.; Gartsherrie, 61s, 6d.; Coltness, 61s, 6d.; Glengarnock, 60s. The makers of merchant iron keep well employed, and the larger works are rather busier, but the make is not more remunerative. During the past mouth the foreign trade has been good, considerable shipments of finished iron having been made to the East Indies and both Americas, and all the works are fairly employed. In ship plates more is being done, and as the Greenock and some few of the Govan and Dumbarton shipbuilders have specifications to give out, they would find it to their advantage to do so while iron is at present prices,

Coals for household purposes have been advanced 1s, a ton for the finer classes, but shipping qualities are stationary in price, with an average demand, at from 6s, 9d, to 8s, 6d, a ton. The shipments for this week amounted to 31,335 tons; last year they were 30,600 tons.

average demand, at from 6s. 9d. to 8s. 6d. a ton. The shipments for this week amounted to 31,335 tons; last year they were 30,600 tons. At our Chamber of Commerce yesterday afternoon some conversation took place regarding the charge of 2½d. per ton made by the Spanish Consul on the shipment of coals at Glasgow. The Consul wrote, in reply to the secretary, that the charge was a legal one, authorised by the Spanish Government; and it was agreed that the Chambers of Commerce in other parts should be communicated with on the subject, before any action was taken. The Ayrshire miners are again about to strike for an advance of 6d. a day on their present rates. In Motherwell and Wishaw districts there are differences with the miners, and in some cases whole works are seeding from the Union.

In Motherwell and Wishaw districts there are differences with the miners, and in some cases whole works are seceding from the Union. During the month seven steamers and four iron sailing vessels were launched on the Clyde, in addition to several wooden ships of various classes. It is to be regretted that last night the shipbuilding works of Alex, Stephen and Sons, and Brown and Simpson, Dundee, were burned to the ground, and the vessels on the stocks were totally destroyed. The damage is estimated at about 60,000L; and fully 200 operatives will be thrown idle, and their tools destroyed. The announcement by the Scotsman, that Mr. Smithell, of the Lanarkshire and Yorkshire Raliway, had been appointed manager of the Caledonian Line, is considered here premature, if not entirely erroneous.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

Oct. 10.-There is no alteration in the state of the Iron Trade of North Derbyshire, which continues quiet, although there is a large out-put of pig, and most of the furnaces are kept in blast. The Coa out-put of pig, and most of the furnaces are kept in blast. The Coal Trade continues active, and a large quantity of coal is being forwarded to the southern markets. For the month of September there was sent from Clay Cross to London 26,814 tons, whilst from nearly all the large collieries business has been brisk. In the southern division there are now about 900 men out, without the slightest prospect of their being employed. As anticipated in last week's notice, the crisis is rather nearer at hand than many persons anticipated. The employers at several of the collieries having had offers from a large ployers at several of the collieries having had offers from a large number of men desirous of working in the district, at once set them on, which so incensed the Unionist that threats and intimidation were freely used. To such an extent were those weapons used, that the secretary of the Miners' Association, a local preacher, named Jonas Hooper, was on Monday convicted of intimidating workmen at Bretby Colliery, and sentenced to one month's imprisonment, with hard labour. He has appealed against the conviction to the Sessions. In the neighbourhood of Burton-on-Trent the greatest distress prevails amongst the coiliers and their families, and there can be no doubt but what a large number of the men would willingly return to work if they could do so without being stigmatised as "black sheep" by those who have been associated with them. But, notwithstanding the fact that the South Yorkshire miners have promised them considerable pecuniary assistance, it will all be useless, and only prolong a struggle during every week of which the miner will gradually become in a hopeless state of dependence on the bounty of the charitable, for the colliery proprietors appear determined on no consideration whatever to give way, or by any means whatever to sanction the employment of Union hands.

whatever to give way, or by any means whatever to sanction the employment of Union hands.

There is very little change in the state of affairs at Sheffield, several of the lighter branches of the Steel Trade being very quiet; there is, however, some prospect of an improvement in the heavier departments, more especially with regard to armour and other plates.

In South Yorkshire business is very fair, although one or two houses are not so busy as they have been. At Thorneliff there is a slight failing off in heavy pipes, but most of the other branches are fairly off, but not very active. At Milton and Elsecar there is continued activity, and a considerable output of ralis and plates, as well as sheets and bars. In the same locality the East Fitzwilliam Collieries are now kept faily going, as are also the ironstone mines. In Steam Coal there is accreely so much being done either for Hull or Grimsby, but there is an average business to Goole for south and western ports. House Coal is in good demand, and a heavy tonnage is being forwarded to London, and in a more southerly direction. To Lancashire also there is a good business being done in engine fuel, and "hards" by the Manchester, Sheffield, and Lincoinshire line of railway, whilst for gas nuts, Slikstone qualities, the orders in hand are fully equal to the ability of masters to supply. At the Oaks Colliery there is nothing new to note, but it is expected that in a short time the scaffolding in No. 2 shaft will be taken up, when the work of clearing and raising the bodies, it is expected, will proceed more rapidly than hitherto.

"PARKIN JEFFCOCK-BORN OCT. 27, 1829, DIED DEC. 13, 1866."

Such was the inscription engraved upon the brass plate of the coffin of the heroic man whose name it contains, when his mutilated corpse of the heroic man whose name it contains, when his mutilated corpse was deposited in its last resting place, on Monday, in Ecclesfield Church, by the side of his ancestors. We all sympathise in the mournful satisfaction which has accompanied the finding of Mr. Jeffcock, John Smith, Christopher Siddons, and Alfred Hoyland. That long line of houses known as Emr-row, near to the Oaks Colliery, which ever since the explosion has had its blinds drawn, told of the sorrowful expectation of its widowed and orphaned inhabitants, and they will, doubless, remain drawn in the greater number of the houses until the pit has been thoroughly explored. We all cling to the desire to give our dear ones Christian burlal. As it respects Mr. Jeffcock himself, it has been correctly remarked that it will be well that mining engineers who are yet young should know where to visit his grave—the grave of a man who is worthy to be imitated, not alone because of his high professional attainments, but also because of that true gentlemaniliness which made his death to be mourned by very many persons whom fortune had placed in a lower social position than he had occupied, but to whom Parkin Jeffcock's Christian counseland unpresuming charity had been a source of hope and comfort in times of deepest trouble and distress. Well might the Rev. Dr. Gatty evince the emotion which he could not restrain at the grave of his friend, whose funeral service he read upon its brink, for he had not only known him as his own friend, but as the friend also of his poor parishoners. And well, too, might there be deep emotion amongst the crowd of persons who througed that grave, and who were sensible of the good that the deceased gentleman had done; whilst others reverenced his memory because of the perlis which he had so resolutely encountered, in the hope of saving the lives of others.

We would commend to the thoughtful perusal of every young mining engineer.

ing the lives of others.

We would commend to the thoughtful perusal of every young mining engineer that little volume of a hundred pages, with the modest title of "Parkin Jeff-cock, Civil and Mining Engineer: a Memoir by his Brother." Mr. Jeffcock's life as there sketched, should it be imitated by those who are following him in the same profession, may yet realise the issue of a charitable life, and "the good" that he has done "live after" him.

The interment of Sugden, the deputy steward, which took place at Dodsworth,

four miles from the colliery, on Sunday last, was most remarkable in the character of the mourners. We question if any profession but that of mining could have supplied such a scene. The corpse was followed to the grave by no fewer than 140 widows of men who had died with him; and this was occurring but a few miles from the spot, and within an hour or two of the time at which the collers were endangering each other's lives in a drunken brawl, originating in an attempt by one party to prohibit the other from earning their bread without restraint. In the face of dangers unparalleled in any other pursual, it may well be said to the men whose cruel vagaries are sketched in another article, what NELSON said to two of his officers who were calling each other out within sight of their common foc, "There's the enemy; shake hands."

IRON GIRDER MANUFACTURE AT PARKGATE WORKS.

sight of their common foe, "Thore's the enemy; shake hands," sight of their common foe, "Thore's the enemy; shake hands," IRON GIRDER MANUFACTURE AT PARKGATE WORKS, ROTHERHAM.

At a time of general depression in the iron trade, and particularly in works producing as their staple rails and plates of a high class and character, where the effects of low prices and unrestricted competition for the few orders coming out are necessarily fail and character, where the effects of low prices and unrestricted competition of works manufacturing chaper brands for the general market, like gratifying to find the Parkgate Iron Company (Limited), a firm of more than by the run of works anomate under the members of the manufacturing in correlative, succeed by the development of new brands of the members in commentary in the company have recently expended a considerable sum of money in director. The company have recently expended a considerable sum of money in director, and note improved seite than they had inhere a tetuplet, and an own recent and mote improved seite than they had inhere a tetuplet, and an own recent and mote improved seite than they had inhere a tetuplet, and an own recent and mote improved seite than they had inhere a tetuplet, and an own recent and mote improved seite than they had inhere a tetuplet, and an own recent and mote improved seite than they had inhere a tetuplet, and an own recent and the search of the search

SEPARATING GOLD AND SILVER FROM LEAD.

SEPARATING GOLD AND SILVER FROM LEAD.

For some time past an improved mode of separating gold and silver from lead—the invention of Mr. Edward Balbach, just and sold silver refiners of Newark, New Jersey, U.S., and as the process has now been critically examined and reported upon by Prof. C. F. Chandler, of the Columbia College School of Mines, some particulars relative to the results obtained will not be uninteresting. It is claimed that by this means the former expensive and tedious process of cupelling a large quantity of lead to obtain the gold and silver, and thereby oxidising the lead, is avoided, and reduced to a few pounds, and results can now be obtained in a day which formerly occupied several days to reach, while the great loss of lead and cost of cupied several days to reach, while the great loss of lead and cost of labour, as well as of fuel, is saved. From 1 to 4 per cent, of zinc is used, according to the richness of the lead, and the zinc is then returned to the metallic state, and in a few hours can be used again. The cost of the furnaces necessary for treating from 8 to 10 tons of lead per day does not exceed 100%, whilst the labour needed is of the cheapest kind, as anyone of ordinary intelligence can be taught the method in a day or two; it is estimated that the entire cost of separating the gold and silver from 1 ton of lead, including labour, loss of materials, and fuel, will not exceed 11. The process offers the great advantage that all the materials used can be reproduced on the great advantage that all the materials used can be reproduced on the spot, so as to be re-used without any loss or expense over that stated, which is an item not to be overlooked by those interested in the rich mines of the American continent. Also of rendering very valuable the rich lead lodes of California, Colorado, and other places which carry gold or silver, by producing the lead in a pure metallic state ready for the market, separated from the gold and silver.

Both the process itself, and the products obtained in its various stages, were carefully examined, and Prof. Chandler, who was accompanied by his assistants, Mr. E. C. H. Day and Mr. John Torrey, seasor in the U.S. Assay Office, reports that the parts of the process to which the inventor particularly drew their attention were—the sweat-

which the inventor particularly drew their attention were—the sweating of the lead, mixed with zinc, in a sweating furnace, so as to separate the greater part of the lead as pure lead from the enriched zinc; and the distillation of zinc-lead thus obtained in retorts of a peculiar construction, and in a furnace specially designed for their use. The weight of the lead before its admixture with zinc was 827 lbs., and it was found by assay to contain 0.77 ozs. of gold, and 65.23 ozs. of silver of the value together of 201. 1s., whilst the pure lead after the sweating contained but a trace of gold and 0.96 os. of silver, of the value together of 5s. A sample of the "zinc-lead" left after the sweating was also submitted to several examinations. but the unequal distribution of the zinc in the lead rendered the result

but the unequal distribution of the zinc in the lead rendered the results very variable, and unreliable as an estimation of the value of the bulk. From these results it is concluded that the method of adding the zinc, and subsequently aweating off the lead, the latter is very largely desilverised, and it seems probable that if the proportions of zinc added had been slightly modified, the desilverisation in the instance referred to might have been made even more complete. Although the examination of "give-lead" was an unsatisfactory, vet it does the examination of "zinc-lead" was so unsatisfactory, yet it does not affect their conclusions, as it is evident that it must contain all the precious metals, excepting the trifling amount of silver left in the pure lead. the pure lead. Secondly, they have no reason to suppose that any loss, otherwise than mechanical, can occur in the distillation; and the nature of the retorts, which also admit of being very easily and economically heated and worked, and the arrangements for reworking all refuse, provide completely against any and prochamical loss. ing all refuse, provide completely against any such mechanical loss.

The process to which the present bears the nearest resemblance is that of Parkes, but Prof. Chandler and his assistants were unable to give an opinion upon the novelties claimed by Mr. Balbach. They observe, however, that the whole course of his operations struck them as being remarkable for simplicity, economy, and efficiency, and the examination of the refined lead showed that whilst it contained but little precious metal, it is not injured for the market by its temporary admixture with zinc.

MINERAL STATISTICS OF GREAT BRITAIN.

BY MR. ROBERT HUNT, F.R.S. LEAD AND SILVER.

The Total Quantity of Lead Orge raised and sold in the United Kingdom during 1866, and Silver obtained, was as follows:—

Lead Ore ... Tons 91,047 15 Value £1,161,228
Lead ... 67,399 14 1,381,599
Silver ... 636,188 028 174,951

The total quantity of zinc ores, principally sulphide of zinc (black jack) from British Mines in 1866 was 12,769 tons 20 cwts. 2 qrs., the value of this ore being stemated at about 42,6654. 4s. The average produce of the ore being 25 per cent great the produce of metallic zinc as 3192 tons 10 cwts., which quantity, computes 21,118s., the average market price of zinc for the year, would give the sum of easily, 4s. 60.

TIMOM I	T TOT I						
	9,533	17	2	Value	£ 9,634	15	7
	915	4	0		729	7	3
	5,000	0	0				0
	3,000	0	0		1,625	0	
	2,750	0	0		1,250	0	0
	1,517	5	0		907	16	0
11	2,686	6	1	******	59,036	0	0
18	5,402	12	3		£77,932	18	10
	berland11	Tons 9,533 915 berland 5,000 3,000 2,750 1,517 112,686	Tons 9,533 17 915 4 berland 5,000 0 3,000 0 2,750 0 1,517 5 112,686 6	Tons 9,533 17 2 915 4 0 berland. 5,000 0 0 2,750 0 0 1,517 5 0 112,686 6 1	Tons 9,533 17 2Value berland 5,000 0 0 3,000 0 0 2,750 0 0 1,517 5 0 112,686 6 1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	915 4 0 729 7 berland, 5,000 0 0 4,750 0 3,000 0 0 1,625 0 2,780 0 0 1,250 0 1,517 5 0 997 16

GOLD. Total production Welsh gold. 2927 19 0 8 742 16 10

Total from Cornwall 1676 7 0 £1365 10 7
Devonshire—Sundry mines 97 0 0 48 10 0
Isle of Man 180 0 75 0 0
Anglesca—Mona Mines 3125 0 0 1560 0

Total of gossans, &c. 5028 7 0 £3049 0 7 FLUOR SPAR.

Cornwall—Damsel, West Wheal....Ton 1 11 0Value £1 17 3

PETROLEUM FOR FUEL—ITS ECONOMY CONSIDERED.—The follow

PETROLEUM FOR FUEL—ITS ECONOMY CONSIDERED.—The follow-gls a resumed of our conclusions on the amount and the cost of the heat generated by the combustion of petroleum. Petroleum, weight for weight, has 50 per at more heating power than coal, a fact expressed by the ratio 21 to 14, or 3 to fiell costs 21 cents per gallon and coal \$6 per ton, then the oil heat costs six mes more than the coal heat. Oil, equivalent in price to coal at \$6 per ton, weight of the coal heat. Oil, equivalent to oil at 21 c. per gallon, would state the coal heat. Oil, equivalent to oil at 21 c. per gallon, would state the figures used in the discussion as favorable to petroleum as could be chosen; to avoid the inconvenience fractions, we have selected the nearest simple expressions which would make elect case for petroleum. Thus we have reckoned the gallon of oil at 7 hs., coal of \$6 per ton as \$4 c. per pound, and we have assumed that actual practice burning oil and coal was fairly conformable to the ratio 3 to 2. As to the necleal experiments, we regree we are obliged to say that, on the question the economy of burning, they appear quite unsatisfactory. No authentic command of the conomical results attained in the experiments with Colonel of apparatus at the Charlestown Navy Yard, or on board the gunboat Palos, as come to our notice. Is it not a little remarkable that in the voluminous highlestons in newspapers and elsewhere the one most vital point was ignored? the experiments with the same kind of apparatus at the Battery, in this city, which force of the steam evaporated seems to be used in blowing the fire under eboller. In the experiments at the Brooklyn Navy Yard, which have been yet skilfully conducted under the supervision of Lieutenant Clark Fisher, 12 is his, of water were evaporated by 1 hb. of oil; but against this (in a discussion conducted under the supervision of Lieutenant Clark Fisher, 12 is his, of water were evaporated by 1 hb. of oil; but against this (in a discussion for supervision of Lieutenant Clark Fisher, 12

Total \$11.400

THE GREAT REPUBLIC GOLD AND SILVER MINING COMPANY.

was and ure

oz.

ons, ults ulk.

the

gely

ugh does all t in

any and and ork-

ce is le to

Description of the Legislature of the State of Virginia, U.S.A., on the 28th day of January, 1867.

Capital £860,000.

Of which £150,000 have been fully paid up, and \$500,000 (equal to £100,000), in shares, at the rate of ten shares for each bond, have been deposited at the bankers for conversion.

ISSUE OF £100,000 SEVEN PER CENT. FIRST MORTGAGE BONDS, Price of issue, £60 per £100; deposit on application, 20 per cent., balance on allotment.

w offered at the above discount are sterling coup bearing interest at the rate of 7 per cent. per annum, payable semi-an-per on the 28th of January and 28th of July, at the bankers, in London.

Some are convertible, at the option of the holder, into fully paid-up shares, which shares have been deposited at the bankers in the name of the semi-condition of the conversion, provided application is made for that purwhim three years, to the trustees in London, or at the company's office, 8th, U.S.A.

Major CHARLES W. BUTTZ, Norfolk, Virginia.

TRUSTERS IN LONDON.

EDWARD A. HADLEY, Esq., 6, Stone-buildings, Lincoln's Inn.

CHARLES H. PRIOR, Esq., 24, George-street, Hanover-square.

NATHANIEL D. PIGGOTT, Esq., Norfolk, Virginia.

BANKERS.

BANKERS.

BANKERS.

BANKERS.

BANKERS.

TREASURER. SMITH G. TUTTLE, Esq., Norfolk, Virginia.

W. H. SMITH, Esq., 132, Gresham House, Old Broad-street.

Mr. HARVEY B. LANCRAFT, Norfolk, Virginia.

No. 183, GRESHAM HOUSE, OLD BROAD STREET, LONDON.

NICHOLLS, MATHEWS, AND CO., ENGINEERS, BEDFORD IRONWORKS, TAVISTOCK.

MANUFACTURERS of STRAM ENGINES OF EVERY DESCRIPTION, made on the BEST and NEWEST PRINCIPLES. We beg more especially to call the attention of the public to the MANUFACTURE of our BOILERS, which have been tested by most of our leading engineers. PUMP WORK CASTINGS OF EVERY DESCRIPTION, both of brass and iron. HAMMERED IRON and HEAVY SHAFTS OF ANY SIZE. CHAINS Lade of the best fron, and warranted. MINERS TOOLS and RAILWAY WORK OF EVERY DESCRIPTION.

ALL ORDERS FOR ABROAD RECEIVE their BEST ATTENTION. NICHOLLS, MATHEWS, and Co. have had 20 years' experience in supplying machinery to foreign mines, and selecting experienced workmen to crect the same, where required.

Messre. NICHOLLS, MATHEWS, and Co. have always g LARGE STOCK of SECOND-HAND MINE MATHERIALS in stock, and at moderate prices.

FOR SALE.—A LIFT of 16-in, PUMPS and BOTTOMS, all in excellent order; a quantity of hammered iron STRAPPING PLATES, all in excellent condition; and a WATER-WHEEL, 25 feet diameter by 3 gob breast, nearly now.—Application to Nicholls, Mathews, and Co., Bedfagd Ironworks, Taylstock.

JOHN HOCKING AND SON, ENGINEERS, REDRUTH, CALL the ATTENTION of COLLIERY PROPRIETORS and others to the present favourable opportunities for the purchase of secondhand CORNISH PUMPING ENGINES and BOILERS at cheap rates. Plans, valuations, removal, &c., of every description of mining machinery undertaken.

FOR SALE, ONE superior 30 in. DOUBLE ROTATORY ENGINE.

WILLIAMS'S PERRAN FOUNDRY COMPANY,
PERRANARWORTHAL, CORNWALL.
MANUFACTURERS of STEAM PUMINING and EVERY OTHER KIND of
ENGINES, together with BOILERS, PUMP CASTINGS, and MINING TOOLS
of every description, of the very best quality. Estimates given for the supplyor
any amount of machinery.
London Agent.—Mr. Edward Cooke, 76, Old Broad-street, London, E.C.

RAILWAY CARRIAGE COMPANY (LIMITED)

RAILWAY CARRIAGE COMPANY (LIMITED)
ESTABLISHED 1847.
OLDBURY WORKS, NEAR BIRMINGHAM.
MANUFACTURERS OF RAILWAY CARRIAGES and WAGONS, and EVERY
DESCRIPTION OF IRONWORK.
Passenger carriages and wagons bult, either for eash or for paymentover a period of years.
RAILWAY WAGONS FOR HIRE.
CHIEF OFFICES,—OLDBURY WORKS, NEAR BIRMINGHAM.
LONDON OFFICES,—6, STOREY'S GATE, GREAT GEORGE STREET,
WESTMINSTER.

THE BIRMINGHAM WAGON COMPANY (LIMITED)
MANUFACTURE RAILWAY WAGONS of EVERY DESCRIPTION, for
HIRE and SALE, by immediate or deferred payments. They have also wagons
for hire capable of carrying 6, 8, and 10 tons, part of which are constructed specially for shipping purposes. Wagons in working order maintained by contract.

WAGON WORKS,—SMETHWICK, BIRMINGHAM.

*** Loans received on Debenture; particulars on application.
London Agent—Mr. E. B. SAVILE, 67, Victoria-street, Westminster, S. W.

STAFFORDSHIRE WHEEL AND AXLE COMPANY
(LIMITED),
MANUFACTURERS of RAILWAY CARRIAGE, WAGON, and CONTRACTORS' WHEELS and AXLES, and other IRONWORK used in the CONSTRUCTION of RAILWAY ROLLING STOCK.
OFFICES AND WORKS,
HEATH STREET SOUTH, SPRING HILL, BIRMINGHAM.
LONDON OFFICE,—118, CANNON STREET, E.C.

BOWLING IRON COMPANY

BEST CRUCIBLE CAST-STEEL TYRES, AXLES, CRANK AXLES, BOILER PLATES, Also COG WHEELS, and other CASTINGS.

This company is prepared to furnish the above-mentioned articles in CASI
STEEL of a very superior quality, made principally from their own well-known
"BOWLING IRON." BOWLING WROUGHT-IRON SOLID WELDLESS TYRES, of any size

BAGILLT OIL COMPANY (LIMITED),

MANUFACTURERS OF BLACK GREASE COLLIERY WIRE ROPES, TRAMS, WAGONS, &c., £5 PER TON TORCH AND LAMP OIL, 1s. PER GALLON (Casks free).

LUBRICATING OIL, 1s. PER GALLON (Casks free). ALSTON, CUMBERLAND.

 $\mathbf{F}^{ ext{or}}$ sale, by private bargain, the whole interest of the present shareholders in BIRCHY BANK MINE

The take extends in length 600 fathoms, adjoining the Rodderupfell Mining Company's ground on the west, and in breadth 20 fathoms north of the north vein, and 20 fathoms south of the south vein.

Application to be made to Mr. JOHN FEART, Mining Agent, Alston; or INGLEDEW, Esq., Solicitor, Dean-street, Newcastle-on-Tyne.

STEEPLE ASTON IRON ORE COMPANY (LIMITED).—
The property acquired by this company contains TWO BEDS or DE-POSITS of FIRST-CLASS IRONSTONE, estimated to be capable of yielding TWO MILLION TONS of that mineral. Both beds have been proved, and the ore can be readily sold in Staffordshire to yield 13s, per ton, its cost being about 7s, per ton; and a contract is about being entered into with an engineer to raise a daily quantity, which, allowing for all contingencies, will return a DIVIDEND of not less than FIFTY PER CENT. per annum on the paid-up capital.

capital.
Investors are recommended to apply to the Secretary for the full prospects this safe and genuine investment. There are only a few shares remaining be allotted at par.

95. Gracechurch-street, London.

95. Gracechurch-street, London.

HIRNANT LEAD MINE, MONTGOMERYSHIRE,—
The above PROPERTY, not being disposed of by auction as advertised
on the 8th Inst., WILL NOW BE OFFERED PRIVATELY.
To treat, apply to Mr. T. W. HILL, Auctioneer, Oswestry.—Oct. 9, 1867

HEAL BASSET.—WANTED, a ROTATORY ENGINE, from a 24 to 28 inch cylinder, about 9 feet stroke, with or withou BOILERS. Offers, stating particulars and lowest price for cash, also where to be seen, should be forwarded to the Committee on or before FRIDAY, the state of the committee on or before FRIDAY, the state of the committee on or before FRIDAY, the committee on or before FRIDAY. Dated Wheal Basset, Redruth, 9th October, 1867.

WHEAL BASSET.—Notice is hereby given, that TENDERS for the SUPPLY of GOOD MINING COALS to this MINE for six or twelve months will be RECEIVED up to FRIDAY, the 18th instant. The requirements will be from 256 to 360 toos monthly. The quality of the coals to be approved of by the manager and engineer of the mine. Scaled Tenders to be addressed to the Committee, Wheal Basset, Redruct.

CONNORREE MINING COMPANY (LIMITED).—Notice is hereby given that an EXTRAORDINARY GENERAL MEETING of this company will be HELD at their offices, 33, Westland-row, Dublin, on SATURDAY, the 19th instant, at the hour of One o'clock P.M., in order to take powege to raise a SUM not exceeding FIVE THOUSAND POUNDS for the purposes of the company, and to decide the mode in which such sum shall be raised.

By Order, GEORGE DEDRICKSON, Secretary.

33, Westland-row, Dublin, 9th October, 1867.

THE CHONTALES GOLD AND SILVER MINING COMPANY (LIMITED).—Notice is hereby given, that the SECOND ORDINARY GENERAL MEETING of the shareholders in the CHONTALES GOLD AND SILVER MINING COMPANY (LIMITED) will be HELD at the London Tavern, Bishopsgate-street Within, in the City of London, on TUES-DAY, the 29th day of October, 1867, at Twelve o'clock.

The Transfer Books of the company will be closed from the 17th to the 30th days of October, both inclusive.

By Order,

185, Gresham-house, London, October 11th, 1867.

PAQUARIL GOLD MINING COMPANY (LIMITED).

TAQUARIL GOLD MINING COMPANY (LIMITED).

The number of SHARES required by the prospectus and Articles of Association of the above company, having been APPLIED FOR and ALLOTTED, the Chairman of the directors, Hugh Birt, Eaq., late of the St. John del Rey Company, has gone out to complete the purchase of the property and take possession, and was accompanied by Capt. H. Pengliley and four Corpish miners, so that operations may be commenced without delay. Capt. Penglily, from his former experience in the mine, entertains no doubt of being able to take out gold within two months of his arrival on the spot, and prove that the sanguine expectations entertained of the result have been fully warranted.

Mossra. J. B. MOORS and Co., of Liverpool and Rio de Janeiro, have been appointed agents of the company in Brasil.

S. N. O. W. D. O. N. S. L. A. T. E. O. U. A. P. R. V. C. L. M. M. T. F. D.

SNOWDON SLATE QUARRY (LIMITED), JOHN BOWER, Esq., D.C.L. Oxon, Managing Director

RAILWAY WAGON WORKS, BARNSLEY.

MESSES. G. W. AND T. CRAIK

ARE PREPARED TO SUPPLY COAL AND COKE WAGONS OF EVERY DESCRIPTION,

Either for cash, or by preferred payments through wagon-leasing companies. WAGONS PROMPTLY REPAIRED.

THE BEVERLEY IRON AND WAGON COMPANY

MANUFACTURERS OF RAILWAY WAGONS, WHEELS, OR IRONWORKS, BEVERLEY, YORKSHIRE.

NORTH CENTRAL WAGON COMPANY, ROTHERHAM.

PAILWAY WAGONS of all DESCRIPTIONS to be SOLD or LET.—FORTY 8-ton COAL WAGONS (only run for three months) TO BE LET as SECOND HAND. A FEW COKE WAGONS, in good condition, Application to be made to Mr. Barras, Secretary, Rotherham. RAILWAY WAGONS.

TO LET, on Redemption Lease or Hire, SECONDHAND BROAD
AND NARROW GAUGE RAILWAY WAGONS, in good condition.
For particulars, apply to the— BRISTOL AND SOUTH WALES RAILWAY WAGON COMPANY (Limited), Exchange-buildings, Bristol.

JOHN CURTIS, Secretary. H E A T L E Y K I

8, ESSEX STREET, MANCHESTER.
Twenty-five years' experience as KIR

VALUER, AUCTIONEER, AND AGENT

for the purchase or sale of MILLS, WORKS, MINES, ESTATES, LAND, BUILDINGS, STEAM ENGINES, ENGINEERS' TOOLS, RAILWAY AND CONTRACTORS' PLANT, MACHINERY, &c.

[See his Monthly Circular.] THOMAS EDINGTON AND SONS,

THOMAS EDINGTON AND SONS,
PHENIX IRONWORKS, GLASGOW,

MANUFACTURERS OF ALL KINDS OF GAS AND WATER
PIPES, BRANCHES, BENDS, WATER-TRAPS, TANK-PLATES,
VALVES, and GENERAL CASTINGS.
ALSO,
RAILWAY CHAIRS AND SLEEPERS, AND GRIFFIN'S PATENT
PERMANENT WAY.
LONDON OFFICE,—63, OLD BROAD STREET.

WILSON'S PATENT SMOKELESS FURNACE.

LICENSEES AND SOLE MANUFACTURERS HICK, HARGREAVES, AND CO., SOHO IRONWORKS, BOLTON

These furnaces are now in full operation, and are giving most satisfactory results, both as regards economy in fuel, complete consumption of smoke. and small wear and tear of furnace. They may be seen in daily operation at these

VENTILATED FUEL

(BIRD'S PATENT) CAN BE MADE BY HAND-PRESS LABOUR AT THE PIT'S MOUTH, or at any WHARF OF YARD where COAL OF COKE DUST IS

For particulars or licenses, apply to—

JAMES BIRD, No. 2, LAURENCE POUNTNEY HILL, CITY, LONDON.

HERBERT AULT, ENGINEER, DRAUGHTSMAN AND PATENTEES' ASSISTANT,

VALUER OF MACHINERY, IRONWORKS, RAILWAY and COLLIERY PLANT, and other works; DESIGNER and CONTRACTORS' and other J.OCOMOTIVES, HOT AIR and HOT WATER APPARATUS, &c.

Preparer of models &c., for patentees, and every other assistance given upon the most moderate terms. Estimates given for taking down and erecting works and other machinery.

Applications addressed to Herbert Ault, Netherton, near Dudley, will meet the prompt attention.

Applications addressed to HERBERT AULT, Netherton, near Dudiey, will meet with prompt attention.

N.B.—HERBERT AULT begs to call the attention of gentlemen about to put up greenhouses or conservatories to his large assortment of designs at exceedingly low prices.

W. F. THOMAS AND CO.'S NEW PATENT SEWING MACHINES, Producing work alike on both sides (lock-stitch).

£5:5s. CATALOGUES] 1 and 2, CHEAPSIDE, And REGENT CIRCUS, OXFORD STREET, LONDON.

INDIA-RUBBER, GUTTA-PERCHA, AND TELEGRAPH WORKS COMPANY (LIMITED), MANUFACTURERS OF

VULCANISED INDIA-RUBBER
FFER SPRINGS for LOCOMOTIVES and RAILWAY TRUCKS, VALVE
SHEET, WASHERS, SUCTION and DELIVERY HOSE, TUBING for
GAS, &c., MACHINE BELTING, ELASTIC STEAM PACKING
in ROPE, SHEET, and RINGS, &c., &c.

EBONITE
SHEET, PUMPS, TAPS, TUBING, &c., for acids and vinegar; PHOTO-GRAPHIC and SURGICAL ARTICLES, SPEAKING TUBING, &c.

GUTTA-PERCHA

SHEET, TUBING, PUMP BUCKETS, VALVES, MACHINE BELTING; VESSELS for chemicals and acids, &c.; WATERPROOF CLOTHING,
HOT-WATER CUSHIONS, MATTING, GROUND SHEETS,
APRONS, WAGON COVERS, &c., &c.

APRONS, WAGON COVERS, &c., &c.

TELEGRAPH INSTRUMENTS,
INSULATORS, BATTERIES, INSULATED WIRE, and every description of
TELEGRAPH APPARATUS and STORES.

TELEGRAPH APPARATUS and TOPPER APPARATUS APPARATUS APPARATUS APPARAT Vulcanised India-rubber specially prepared to witnesses lead climates. WORKS, SILVERTOWN, ESSEX.

GREEN SLATES.

GREEN SLATES OF ANY SIZE, and of the CHOICEST COLOUR and QUALITY, can now be OBTAINED from the DOROTHEA WEST SLATE COMPANY (LIMITED), CARNARYON.
The "CHARING CROSS HOTEL," "STAR AND GARTER HOTEL" (Richmond), "LONDON-BRIDGE HOTEL," and many other public buildings, are covered with these elecant slates.

S O N 1/3

"LONDON-BRIDGE HOTEL," and man,
"LONDON-BRIDGE HOTEL," and man,
these elegant slates.
Orders will be executed in regular succession.
Apply to Mr. THOMAS HARVEY, General Manager, 9, Segontium-terrace, Carnarvon, or 33, King-street, Cheapside, London.

R O B E R T L I B B Y A N D S O N
MINE AND SHAREDEALERS, &c.,
CAMBORNE, CORNWALL.

M. R. W. HANNAM, MINING, SLATE QUARRYING, INSURANCE, AND GENERAL SHAREBROKER.
ROYAL INSURANCE BUILDINGS, KING STREET MANCHESTER; and 449, STRAND, LONDON, W.
INSTANTANEOUS COMMUNICATION with the STOCK and MINING EXCHANGES, avoiding the delay and annoyance of visiting the City to ascertain prices. A Monthly Investment Circular on application.

NOTICE.—CAPT. S. M. RIDGE, of LLANIDLOES, MONTGOMERYSHIRE (late manager of the Brynpastig and Cwm Fron Mines, and others, in Shropshire and Wales), is NOW OPEN to INSPECT and fatthfully REPORT UPON ANY LEAD MINE in either of these localities that may be confided to his care, having had better than 30 years' experience in lead mining, as miner and agent.—Address, Capt. S. M. RIDGE, Llanidloes, Montgomershire.

M R. P. S. H. A. M. I. L. T. O. N.,
AND REACTICAL GEOLOGIST.
OFFICE,—No. 72, GRANVILLE STREET, HALIFAX, NOVA SCOTIA.

TO BE SOLD, FIVE SHARES in this company (£87 10s. per share, apply to "X. Y. Z.," MINING JOURNAL Office, 26, Fleet-street, London.

LANFAIR GREEN AND BLUE SLATE QUARRY, COMPANY (LIMITED).—Manager, T. HARVEY, Esq.—TO BE SOLD, FORTY SHARES, at £1 per share. No calls.—Address, "A. B.," MINING JOURNAL Office, 26, Fleet-street, London.

JOURNAL Office, 26, Fleet-street, London, E.C.

N.B.—Sales and purchases of lands, quarries, and mining property negotiated with the line of the data daynatageous terms, and with all possible dispatch. Explorations made or supervised, and reports prepared where required with the umost earce. Public attention is called to the fact that, owing to his experience as Gold Commissioner and Chief Commissioner of Mines, and as one who has been for years engaged in practical mining and geological explorations, Mr. HAMILJOURNAL Office, 26, Fleet-street, London, E.C.

100

PATENT IMPROVED PICKS.

FOR COLLIERS AND MINERS MADE OF WROUGHT-IRON, YELLOW METAL, AND MALLEABLE CAST-IRON.

For terms and information, apply to the patentees,— F. W. DAHNE, C.E., and Manager of Messrs. Vivian and Sons' Spelter

DAVID THOMAS, Mineral Agent, Cwm Avon Works, Taibach.

The WEST ARDSLEY COMPANY having, by recently patented improvements, perfected their coal cutting machinery, worked by compressed air, are NOW READY to MAKE CONTRACTS for the CONSTRUCTION and USE of their MACHINES.

heir MACHINES.

The results of twelve months' experience in the working of these machines, by the West Ardsley Company, have proved most satisfactory, their use being found to CHEAPEN the COST and IMPROVE the average SIZE of the COAL, to IGHTEN the LABOUR, and also to MODIFY the SANITARY CONDITION the MINE.

of the MINE.
All communications to be made to Messrs. Firth, Donnisthorpe, and Bower, No. 8, Britannia-street, Leeds.

NOTICE.—The WEST ARDSLEY COMPANY, having reason to believe that their nature are below to the company. to believe that their patents are being infringed upon, hereby give noethat they will TAKE LEGAL PROCEEDINGS AGAINST ALL PARTIES omay MAKE FOR SALE, or USE ANY MAGHINERY in the construction which any such INFRINGEMENT is MADE.

NITRO-GLYCERINE, OK NOBEL'S PATENT BLASTING

NITRO-GLYCERINE, OR NOBEL'S PATENT BLASTING OIL.—The EXPLOSIVE FORCE of this BLASTING OIL is TENTIMES that of GUYPOWDER, and the ECONOMY and SAVING in TIME, LABOUR, and COST in removing granite and hard rock, in sinking shafts, driving tunnels, and open'ng forward in close ends is immerse.

It will not exp'ode from a spark or f'e branch concussion alone, and is consequently much less dauge ous than growowder or gun-cotton.

Being heavier than w. er it sirks to the bottom of a wet hole, no other tamping than water being required.

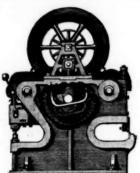
One charge of this blasting oil, which is now being used with wonderful effect in all the largest slate quarries in North Wales, will displace as much slate rock as four or five charges of gunpowder; and its great force, acting on a large quantity of good slate rock, shakes and displaces it at the natural joints, or cracks, without damaging the slabs nearly so much as the more numerous blasts from any other blasting material would do.

This invaluable quarrying agent may now be obtained rom Messrs. Wan and Co., Carnarvon, sole consignees from the patentee.

RED LEAD SUPERSEDED.

NEW "ANTI-CORROSIVE METALLIC PAINT. EW "ANTI-CORROSIVE METALLIC PAINT."—
For some years past Messrs. PEACOCK and BUCHAN have been making careful experiments with an ECONOMICAL and entirely new metallic mixture of an ANTI-CORROSIVE nature, to supersed a RED LEAD as an UNDERCOATING for iron ships' bottoms, and for priming and painting their buils outside and in, also all kinds of out and indoor ironwork, railway plant, &c., as well as for outdoor woodwork, stone, and stucco, &c. Any colour paint will lay on over it. The proprietors have now perfected this metallic paint, and it will be found considerably chee, er than RED LEAD, at the same time effectually preserving the 'ron from rust, scaling, and decay.

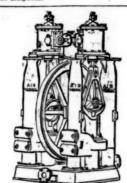
It is ground in oil by steam-power, and packed in ironbound casks from 1 to 2 cwts, each. Price, delivered at Southampton, 22s. 6d. per cwt., packages included. Apply, in London, to W. J. Moysky, 39, Upper East Smithfield [1] and in Southampton, to Messrs. Peacock and Buchan, or their accredited in all IPs principal cities and scaports of the kingdom.



JOHN CAMERON'S

PATENT DOUBLE CAM LEVER STEAM PUMPS,
PUNCHING and SHEARING
MACHINE,
From 2 to 12 in. diameter,

1¼×1¼ in. × 24 in.=8 tons, £185. EGERTON STREET, HULME, MANCHESTER.



JOHN CAMERON'S

SINGLE AND DOUBLE-ACTING. EGERTON STREET, HULLE, MANCHESTER.

CREASE'S NEW AND

IMPROVED PNEUMATIC TUNNELLING ENGINE.

THE PROPRIETORS of this INVENTION, in order to bring its CAPABILITIES more prominently before the PUBLIC, are OPEN to TAKE CONTRACTS for DRIVING LEVELS.
Preference will be given to ADIT LEVELS and those places where ROTATORY MACHINERY is in use, and can be applied to driving the AIR COMPRESSOR.

Address—E. S. CREASE, 7, Hoe-street, Plymouth.

RANDY, 5 RANDY, PURE BRANDY,
A CERTAIN CURE for CHOLERA, spasmodic symptoms, and internal complaints, when unadulterated; but how seldom to be met with in its pure state, unless from the direct importers. C. DEVEREUX and Co., 26, EAST INDIA CHAMBERS, LEADENHALL STREET, LONDON, at 36s., and for "premiere qualité," 47s, per deren, ether pale or brown, bottles and case included.

Forwarded same day against Post-office order or remittance.

ERVOUS DEBILITY: ITS CAUSE AND CURE.—Before seeking aid from the so-called remedies without medicine, read this vaof Appetite, Pains in the Back, Spermatorrhea, &c., with Plain Directions for Perfect Restoration to Health. Sent post free to any address, on receipt of two
postage stamps. Letters of enquiry or det. 13 of case promptly answered.

Address, Dr. SMITH, 8, Burton-crescent, London, W.C.

CURE YOURSELF BY THE PATENT SELF-ADJUSTING CURATIVE AND ELECTRIC BELT.—Sufferers from nervous debility, painful dreams, &c., can now cure themselves by the only guaranteed remedy in Rurope, protected by Her Majesty's great seal. Free for one stamp by H. JAMES Esq., Percy House, Belford-square, London.

CONSULT DR. HAMMOND (of the Lock Hospital, &c.). While the dock Hospital, &c.) which tend to embitter and shorten life, and especially those termed peculiar and confidential. At home, Nine to Two, and Six to Eight; Sundays, Ten to Twelver the "Seif-Curative Guide" post free, two stamps.

N.B.—Cases of recent infection cured in two days.

R. WATSON (of the Lock Hospital), F.R.A.S., Member of the College of Physicians and Surgeons, on the SELF-CURE of NERVOUS and PHYSICAL DEBILITY, Lowness of Spirits, Loss of Appetite, Timidity, Incapacity for Exertion. &c., with means for perfect restoration. Sent free for two stamps by Dr. WATSON, No. 1, South-crescent, Befford-square, London Consultations daily from 11 till 3, and 6 till 8; Sundays, 10 till 1.

Just published, post free for two stamps,

WONDERFUL MEDICAL DISCOVERY, demonstrating the
true causes of Nerrous Mental, and Discovery. Indigestion, Want of Energy, Premature Decline, with plain directions for foct restoration to health and vigour, WITHOUT MEDICINE. Sent free of cript of two stamps, by W. Hill, Esq., M.A., Berkeley House, South-cres Russell-square, London, W.C.

Russell-square, London, W.C.

MANHOOD: A Medical Essay on the Cause and Cure of Premature Decline in Man, founded on the results of a successful practice of 30 years in the treatment of nervous and physical debility, sterility, impotency, effects of climate, and infection.

By J. L. CURTIS, M.D., 15, ALBEMARLE STREET, PICCADILLY.

"MANHOOD.—We feel no hesitation in saying that there is no member of society by whom the book will not be found useful, whether such person hold the relation of a parent, preceptor, or clergyman."—Sun Evening Paper.

"Dr. Curtis has conferred a great boon by publishing this little work, in which ta described the source of those diseases which produce decline in youth, or more trequently premature old ages."—Daily Telegraph, March 27, 1856.

Also, from the same author, for its, or 16 stamps scaled,

Also, from the same author, for is., or 16 stamps scaled,

PR. CURTIS'S MEDICAL GUIDE TO MARRIAGE: A Practical Treatise on its Physical and Personal Obligations. With rules for removing certain disqualifications which destroy the happiness of wedded life. Sold by ALLEN, 11, Ave Maria-lane; Mann, 39, Cornbill, London.

Consultations daily, from Ten to Three, at No. 18, Albemarle-street, Piccadilly London, W.

In the Court of the Vice-Warden of the Stannar Stannaries of Devon

IN the MATTER of the COMPANIES ACT, 1862, and of the LADY BERTHA MINING COMPANIES ACT, 1862, and of the PETITION for the WINDING-UP of the ABOVE-NAMED COMPANY by the Court was, on the 4th day of October inst., presented to the Vice-Warden of the Stannaries, by Peter Watson, a creditor and also a contributory of the said company, and that the said petition is directed to be heard before the Vice-Warden, at the College Hall, Exeter, on Saturday, the 19th day of October inst., at One o'clock in the afternoon.

Any contributory or creditor of the company may appear at the hearing and oppose the same, provided he has given at least two clear days' notice to the petitioner, his so'clotro, or his agents, of his intention to do so, such notice to be forthwith iorwarded to P. P. Smith, Esq., secretary of the Vice-Warden, Truro.

Truc.

Every such contributory or creditor is entitled to a copy of the petition and affidavit verifying the same, from the petitioner, his solicitor, or his agents, within 24 hours after requiring the same, on payment of the regulated charge per follo.

Affidavits intended to be used at the hearing, in opposition to the petition, must be filed at the Registrar's Office, Truro, on or before the 15th day of October instant, and notice thereof must, at the same time, be given to the petitioner, his solicitor, or his agents.

HODGE, HOCKIN AND MARRACK, Truro, Cornection (Agents for Turnell Southgate, 7, King's Bench-walk, Temple, Lonnich, Dated Truro, 8th October, 1867.

Solicitor for the petitioner)

In the Court of the Vice-Warden of the Stannarie Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the GREAT WHEAL BUSY MINING COMPANY.—Notice is hereby given, that a PETITION for the WINDING-UP of the ABOVE-NAMED COMPANY by the Court was, on the 4th day of October inst., presented to the Vice-Warden of the Stannaries by William Harvey, Henry Whitford, John West, William West, Wm. John Rawlings, and William Husband, creditors and also contributories of the said company, and that the said petition is directed to be heard before the Vice-Warden, at the College Hall, Exeter, on Saturday, the 19th day of October inst., at One o'clock in the afternoon.

Any contributory or creditor of the company may appear at the bearing and oppose the same, provided he has given at least two clear days' notice to the petitioners, their solicitors, or their agents, of his intention to do so, such notice to be forthwith forwarded to P. P. Smith, Esq., secretary of the Vice-Warden, Truro. Every such contributory or creditor is entitled to a copy of the petition and affidavit verifying the same from the petitioners, their solicitors, or their agents, within 24 hours after requiring the same, on payment of the regulated charge per follo.

er folio.
Affidavits intended to be used at the hearing, in opposition to the petition, usst be filed at the Registrar's Office, Truro, on or before the 15th day of October stant, and notice thereof must at the same time be given to the petitioners, leir solicitors, or their agents.

HOGEL MARKET TRUE COMMENT.

HODGE, HOCKIN, AND MARRACK, Truro, Cornwall GREGORY, ROWCLIFFES, AND RAWLE, No. 1, Bedford-row Latter Trure, October 8th, 1867. (Agents of the said Solicitor)

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the CLOWANCE WOOD MINING COMPANY (LIMITED).—By an Order made by His Honour the Vice-Warden of the Stannaries in the above matter, dated the 5th day of Oetober instant, on the petition of the said CLOWANCE WOOD MINING COMPANY (LIMITED), and of William James Thompson, of No. 7, Bishopsgate-street, in the City of London, General Agent, a member and contributory of the said company, it was ORDERED that the said CLOWANCE WOOD MINING COMPANY (LIMITED) should be WOUND-UP by this Court under the provisions of the Companies Act, 1862.

(Agents for Matthews and Greetham, No. 68, Lincoln's Inn-fields, Landon, Dated Truro, October 7, 1867.

Solicitors for the Petitioner).

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the ROSKEAR MINING COMPANY.—ALL CREDITORS or CLAIMANTS of the ABOVE-NAMED COMPANY who have not received notice from the Registrar of the said Court that their claims have been already admitted, are hereby REQUIRED to COME IN and PROVE THEIR SEVERAL DEBTS or CLAIMS at Eleven o'clock in the forenon, or in default thereof they will be excluded from the benefit of any distribution made before such proof; and for the purpose of such proof they are either to attend in person or by their solicitors or competent agents, or (miess such attendance be required by the Registrar's summons) they are to send affidavits of their soveral debts or claims to the Registrar of this Coult at Truro, such affidavits being sworn either before some Commissioner of the said Court, or before any Court, Judge, Justice, or any Commissioner of one of the Superior Courts lawfully authorised to take and receive affidavits and affirmations.

WM. MICHELL, Registrar of the above-named Court. True. Could of the court of the said Court.

Mindavits and affirmations.

WM. MICHELL, Registrar of the above-named Court, Truro, County).

Dated Truro, October 10th, 1867.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

Stannaries of Cornwall.

In the MATTER of the COMPANIES ACT, 1862, and of the West Wheal Prosper Mining Company.—To Be Sold, under the direction of the Registrar of the said Court, By Public AuCtion, on Tuesday, the 22d day of October Instant, at the West Wheal Prosper Mine, in the parish of Lanivet, within the said Stannaries (immediately after the close of the said eadvertised to take place at the Woodley Lane Tin Works), in Lots, the Mine Setts of GRANTS of the said company, and the undermentioned Mining Machinery and Materials, namely:—ONE 30 in. ROTARY STAMPING ENGINE, with fly-wheel.

ONE 10 ton BOLLER; 48 heads of STAMP's creeted complete; 2 new iron stamp axies; about 12 cwits of wire rope; wire rope cage for letting down transverses.

HODGE, HOCKIN, AND MARRACK, Solicitors, Truro, Dated Registrar's Office, Truro, October 10th, 1867.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WOODLEY LANE TIN WORKS MINING COMPANY.—TO BE SOLID, under the direction of the Registrar of the said Court, BY PUBLIC AUCTION, on Tuesday, the 22d day of October Instant, at Eleven o'clock in the forenoon, at WOODLEY LANE TIN WORKS MINE, in the parish of Lanivet, within the said Stannaries, in Lots, the MINE SETT or GRANT of the said company,

MINING MACHINERY, MATERIALS, and EFFECTS, namely :-MINING MACHINERY, MATERIALS, and EFFECTS, namely:—
ONE 24 In. STAMPING ENGINE, fly wheel and 9 tons BOILER complete,
with 64 heads of STAMPS, complete; stamps and frames for 12 heads, with iron
axie and lifters; set of single, double, and treble fron blocks; lot of chain of
differencesizes; launders; large wheel pulley; bob and stand; wheel and handbarrows; old iron, shovels; zinc drawing lift; kleves, handracks; carpenters'
bench and chests; brass and hair bottom sleves; a quantity of new and old wire
for fencing; powder house; sundry lots of timber, &c.
The MACHINERY and MATERIALS on ST. BENNETTS, comprising a good
WATER WHEEL, with iron axie, 1 set of stamps, iron and wood lifters, and
other effects in general use in mines.
Further information may be obtained on application to Mr. John Vincent,
in charge thereof.
HODGE, HOCKIN, AND MARRACK, Solicitors, Truth.

HODGE, HOCKIN, AND MARRACK, Solicitors, Trurb.

In the Court of the Vice-Warden of the Stannaries Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the of the Boston William Company. To BE SOLD and and of the Boston William Company. In the MATTER of the COMPANIES AUX, 1862, and of the TRESKERBY MINING COMPANY.—TO BE SOLD, under the direction of the Registrar of the said Court, BY PUCLIC AUCTION, on Tuesday, the 29th day of October inst., at Eleven o'clock in the forencon, at TRESKERBY MINE, in the parish of Gwennap, within the said Stannaries, either together or in lots, the undermentioned

MINING MACHINERY, MATERIALS, and EFFECTS, viz.:—
ONE 36 in. cylinder PUMPING ENGENE, with 11 ton BOILER, and fittings. Shears, with two pulleys, complete; balance bob; 3 iron blocks; hanging rod, with caps and plates; bob for working flat rods, capstan, capstan rope, capstan chain, shaft tackle, with pulleys, 2 horse whims, about 50 fms. ropefand chain, outlet and treble blocks, 48 9 feet 12 inc. bumpe, 7 matching plees, 3 12 feet 12 in. workings, 1 12 in. H and doorpiece, 2 3 ft. doorpieces (11 in.), 2 9 ft. doorpieces, 2 1 ft. doorpieces (11 in.), 2 9 ft. doorpiece, 2 1 ft. buton windbors (11 in.), 1 in., in.), 2 ft. doorpiece, 2 1 ft. buton windbors (11 in.), 1 in., in.), 2 ft. doorpiece (11 in.), 2 ft. doorpiece, 2 1 ft. buton windbors (11 in.), 1 in., in.), 2 ft. doorpiece (11 in.), 2 ft. doorpiece, 2 ft. doorpieces, 2 ft. doorpieces (11 in.), 2 ft. doorpiece, 2 ft. doorpieces, 2 ft. doorpieces MINING MACHINERY, MATERIALS, and EFFECTS, viz. :

TO BE SOLD, a SLATE AND SLAB QUARRY, just opened in DENBIGHSHIRE, NORTH WALKS, within five miles of a railway station, and at a distance of twenty miles from any other quarry. The slates are of a greyish blue colour, and of excellent quality. The vein is about 150 yards, on the side of a hill, and the cost of working will be moderate, as no engine will be required for pumping and hoisting. Royalty has to be paid to the landlord.

For further particulars, apply to Mr. J. Saunders, Lianfair, Abergele, North Wales.

TOLCARNE MINE, CAMBORNE.

M. R. T. MILLS has received instructions to SELL, BY PUBLIC

AUCTION, on Monday and Tuesday, the 14th and 15th days of October Instant, by One o'clock in the afternoon of each day, at Tolearne Mine, in the parish of Camborne, the whole of the MACHINERY and remainder of the MaCHI

DENBIGHSHIRE.

VALUABLE MINERAL PROPERTY,
Situate in the township of COED CHRISTIONYDD, in the parish of RUABON

Situate in the township of COED CHRISTIONYDD, in the parish of RUABON

MR. T. W. HILL WILL SELL, BY AUCTION, at the Wynnstay
October, 1867, in the following or such other lots, and subject to such conditions
as shall be declared at the time of sale.

LOT 1.—All that capital newly-erected MESSUAGE or DWELLING HOUSE,
with the excellent FARM BUILDINGS attached thereto, called or known by a
the name of "TYMAWA"," situate in the township of COED CHRISTIONYDD
aforesaid, and close to the Cafa Station on the Great Western Railway, together
with the 6ARDEN, YARD, and FIVE several excellent PIECES or PARCELS
of MEADOW and PASTURE LAND held therewith, containing in the whole by
recent admeasurement 28a. 1R. 19r., or thereabouts, be the same more or less,
and now in the holding of Mr. John Lloyd.

N.B.—Lot I will be sold subject to a right of road, as shown on the plan to
tot 2. The vendor's right to the mines in and under the land sold to the railway company, and also under certain lands sold to Mr. John Lloyd,
tot 2.—All those FOUR excellent PIECES or PARCELS of PASTURE and
ARABLE LAND, also forming part of Tymawy Farm, containing together by
recent admeasurement 14a. 3n. 37r., or thereabouts, be the same more or less,
and also in the holding of Mr. John Lloyd, as part of Tymawy Farm.
The above-named property presents an unusually attractive opportunity for
the investment of capital, either by the mining speculator or the agriculturis.
From the mineral wealth of the neighbourhood, there can be no doubt that the
coal beds extend under the whole of the property, and may be worked to advantage. It also presents some very attractive sites for the erection of villa residences, which would command views of the Dec Vidanet, the Ponteysylite Aqueduct, Castell Dinas Bran, and the whole of the beautiful Vale of Liangolies.
The land has a southern aspect, and is bounded on the north and east by the
lands of Sir Watkin Williams Wynn. The River Dee, so famous for its excellent
fishing (now carefully preserved), skirts the est

the south.

The property is situate about nine miles from Oswestry, four from Liangloin, and eighteen miles from Chester. The Cefn Station of the Great Western Railand eighteen miles from Chester. The Cefn Station of the Great Western RailLOT 3.—All that TITHE RENT CHARGE arising and payableout of lands in the township of Oced Christionydd aforesaid, and commuted by the tithe apport tonment at the annual sum of \$20.

On application to the Auctioneer, he will appoint a person to show intendel purchasers over the property.

The sale to commence at Four Oclock P.M.
Plans and particulars are in course of preparation, and may shortly be obtained on application to the Auctioneer; or to Messrs. T. and C. MINSHALL, Solicitor, Oswestry.

BY ORDER OF THE LIQUIDATORS, WITHOUT RESERVE, DEVON. BY ORDER OF THE LIQUIDATORS, WITHOUT RESERVE, DEVON.
All that VALUABLE MINERAL PROPERTY, known as the DEVON GREAT
MABIA MINE, situate in LAMERHOE, in the parish of LAMERTON, in
the county of DEVON, not far from the celebrated Devon Great Consols Mine,
together with the BUILDING and MATERIALS belonging to the company
thereon; also, a capital 55-in. cylinder STEAM ENGINE, fitted complete,
with THREE 10 ton BOILERS, now being at the Tamar Mine, Convanil.
The sett is an extensive one, and is held under a lease for 21 years, from the
1st August, 1881, at 25 per annum, with 1-12th royalty. The sum of convanil
was paid on the granting of the lease, which is covenanted to be returned out
of the royalty, and the purchaser will have the benefit of the same.

M. B. BRIANT WILL SELL, BY AUCTION, WITHOUT
Friday, Oct. 1s, at One o'clock precisely, in Two Lots, the ABOVE PROPERTY.
The MINE can be viewed on application to Captain Joseph Richards, and printed particulars may be obtained of F. W. SNELL, Esq., solicitor, I,
George-street, Mansion House, City, or of the auctioneer, 200, Kennington
park-road.

THE ST. CUTHBERT LEAD SMELTING COMPANY (LIMITED). IN LIQUIDATION.

M. R. PHILIP D. TUCKETT is instructed to SELL, B. AUCTION, at the Mart, Tokenhouse-yard, London, on Tuesday, October 22d, at Twelve o'clock, in One Lot, almost without reserve, the very valuab FREEHOLD and LEASEHOLD PROPERTY, known as the

FREEHOLD and LEASEHOLD PROPERTY, known as the
ST. CUTHBERT LEAD SMELTING WORKS,
or the PRIDDY MINERY, three miles from the City of Wells, comprise
THIRTY-SEVEN ACRES OF LAND, of which about 20 acres are covered by
rich and valuable surface accumulation of lead-producing debris, estimated t
contain 35,000 tons of metallic lead; together with the smelting-furraces, et
gine-houses, machinery, manager's house, workmen's cottages, &c., recent
erected at great expense, capable of turning out from 40 to 100 tons of lead p
month, at a cost of from £10 to £12 per ton, with little or no additional outlar,
Particulars, with plans and conditions of sale, may be obtained at the 8w
Hotel, Wells; or of Mr. Philip D. Tuckett, land agent, surveyor, &c., fe.01
Broad-street, E.C., and 3, 8t. Martin's-place, Trafalgar-square, London, W.C.

DYFNGWM LEAD MINES.

DYFNGWM LEAD MINES.

TO BE SOLD, BY TENDER, the above VALUABLE MINES, situate in the parish of PENEGOES, in the county of MINES, situate in the parish of PENEGOES, in the county of the

HADLEY as above.

The purchaser will be required to pay a deposit of 20 per cent. on the among of the purchase-money on his tender being accepted, the purchase to be completed and the balance of the purchase-money paid, within one month from the penets of the deposit.

A GOING COLLIERY FOR SALE, IN NOR STAFFORDSHIRE, containing the whole of the WELL-KNOWN VALUABLE MINES OF BLACKBAND IRONSTONES and COALS in NORTH STAFFORDSHIRE BASIN.

The collery is fully developed, and fitted with machinery capable of rai

The colliery is fully developed, and fitted with machinery capanie of the large daily output, and has direct railway communication. The lease and plant will be sold a bargain.

Apply to W. S. Cope, Mining Engineer, Port Vale, Longport, Staffordsh Port Vale, Longport, Oct. 8, 1887.

B

WIRE STRE

COGENHOE, FIVE MILES FROM NORTHAMPTON. TO BE LET, ON LEASE, INEXHAUSTIBLE BEDS
of any colour, tiles, sanitary pipes, and pottery,
Railway and water carriage on the property to all parts.
Address, "Manager," Cogenhoe Mines, near Northampton.

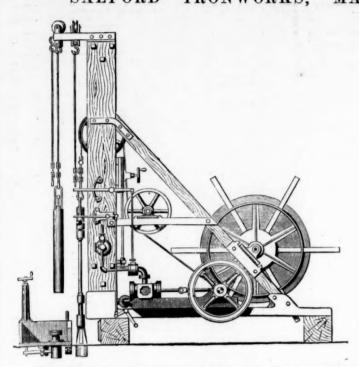
GRANITE QUARRY. STEWARTRY OF KIRKCUDBRIGHT, SCOTLAND.

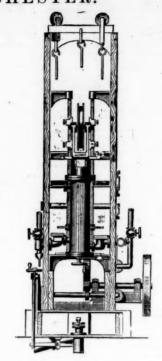
TO BE LET, the RIGHT to QUARRY the GRANITE known the WEDGHE ROCK, which is intersected by the Portpatrick Railway. The colour and quality of this granite have been pronounced by good judge be excellent, and nothing can exceed the facilities for carriage by railwayel to distant parts of the country or to the harbour of Kirkeuddright. The rock has been laid bare, and biasted sufficiently to enable a satisfac opinion of the granite to be formed.

For further information apply to H. J. MOULE, Esq., Gatehouse, Kirkeuddrights.

STEAM-BOILERS made by WILLIAM WILSON, LILYBA BOILER WORKS, GLASGOW, on the most improved principles, for he and export. All boliers made of the best material and workmanship, pressure, and workmanship, pressure, and delivered at any railway and warranted tight under a high pressure, and delivered at any railway tion or shipping port in the kingdom at moderate rates. Lithograph of beforwarded post-free on application.

MATHER AND PLATT, MILLWRIGHTS, ENGINEERS, MACHINE MAKERS, &c., SALFORD IRONWORKS, MANCHESTER.





PATENT EARTH BORING IMPROVED MACHINES.

A considerable number of these Machines has been in most successful operation for some years in exploring for minerals and cal and the boring of Artesian wells, for supplying many towns, manufactories, &c., with water. Upwards of 50 bore-holes, from 6 in. to 24 in. diameter, representing in all 20,000 ft. of boring, have been sunk in various parts of the world, through rocks of every form and degree of hardness, from the New Red Sandstone to the Igneous formations, as well as Chalk and the London Clay.

The Machine is worked entirely by steam-power, requiring a small boiler, from 6 to 12 horse power, according to diameter of the bore-holes. The framing is made of wood, to render the Machine of easy transport.

The rate of boring is not appreciably decreased as the depth increases, as a flat rope is used in place of rods in the old system.

Prices, &c., can be had on application.

IMMENSE SAVING OF LABOUR.

TO MINERS, IRONMASTERS, MANUFACTURING CHEMISTS, RAILWAY COMPANIES, EMERY AND FLINT GRINDERS, MCADAM ROAD MAKERS, &c., &c.

BLAKE'S PATENT STONE BREAKER

OR ORE CRUSHING MACHINE,

FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND. tis rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chill, Brazil, and throughout the United States and England. Read extracts of testimonials:—

The Parys Mines Company, Parys Mines, near Bangor, June 6.—We have had one of your stone breakers in use during the last twelve months, and Captain Moreom reports most favourably as to its capabilities of crushing the materials to the required size, and its great economy in doing away with manual labour.

For the Parys Mining Company,

JAMES WILLIAMS. H. R. Marsden, Esq.

H. M. Marsden, Esq.

Reton Emery Works, Manchester.—We have used Blake's patent stone breaker
made by you, for the last 12 months, crushing emery, &c., and it has givensvery
satisfaction. Some time after starting the machine a piece of the moveable lave
about 20 lbs. weight, chilled cast-iron, broke off, and was crushed in the jaws of
the machine to the size fixed for crushing the emery.
H. R. Marsden, Esq.

THOS. GOLDSWORTHY & SONS.

Alkali Works, near Wednesbury.—I at first thought the outlay too much for simple an article, but now think it money well spent. WILLIAM HUNT.

Welsh Gold Mining Company, Dolgelly,—The stone breaker does its work ad mirably, crushing the hardest stones and quartz. WM. DANIEL.

Our 15 by 7 in, machine has broken 4 tons of hard whinstone in 20 minutes, for fine road metal, free from dust.

Messrs. ORD and MADDISON,
Stone and Lime Merchants, Darlington.

Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons limestone or ore per day (10 hours), at a saving of 4d. per ton.

JOHN LANCASTER.

Ovoca, Ircland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore stone per hour. WM. G. ROBERTS.

General Frémont's Mines, California.—The 15 by 7 in machine effects a saving of the labour of about 30 men, or \$75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered third machine for this estate.

Silas Williams.

For circulars and testimonials, apply to-

H. R. MARSDEN, SOHO FOUNDRY,

MEADOW LANE, LEEDS, ONLY MAKER IN THE UNITED KINGDOM.

TUBING FLEXIBLE PATENT

AND BRATTICE CLOTH FOR MINES

MANUFACTURED BY LEVER. ELLIS

MANCHESTER GORTON

BICKFORD'S PATENT SAFETY FUSE abed the PRIZE MEDALS at the "ROYAL EXHIBITION" of 1851; at "INTERNATIONAL EXHIBITION" of 1862, in London; at the "IM-HALL EXPOSITION" held in Parls, in 1855; at the "INTERNATIONAL MILL EXPOSITION," in Dublin, 1865; and at the "UNIVERSAL EXPOSITION," in Parls, 1867.

EDS cing br

knowi od judge lway ei

atisfae

keudbri

LYBA
be, for he
chip, pro
railway
oh of bo

TURERS of PATENT SAFETY-FUSE, having been informed that the name of their firm has been attached to fuse not of their manufacture, beg to call the attention of the trade and public to the following announcement:

EVERY COIL OF FUSE MANUFACTURED by the THOSEPARATE THREADS PASSING THROUGH the COLUMN ATTACHED, AND THE THREADS AS THEIR TRADE MARK.

Swan Rope Works.

ARNOTOR RESIDENCE OF THE STREET, LIVERPOOL,
INTERCTURERS OF FLAT AND ROUND HEMP and IRON and STEEL
RESIDENCE FOR MINING, RAILWAY, and SHIPPING PURPOSES.
RAILLA ROPE OF SUPERIOR QUALITY, FIFTY PER CENT. STRONGER
MIRRY PER CENT. CHEAPER than Russian hemp rope.
THE ROPE OF FIRST QUALITY WIRE, and the HIGHEST STANDARD
STREETH.

JOHN AND EDWIN WRIGHT,



PATENTEES. (ESTABLISHED 1770.) MANUFACTURERS OF EVERY DESCRIPTION OF

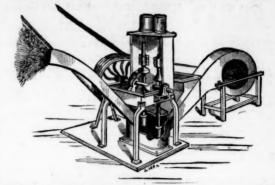
PATENT FLAT AND ROUND WIRE ROPES. From the very best quality of charcoal iron and steel wir PATENT FLAT AND ROUND HEMP ROPES.

SHIPS' RIGGING, SIGNAL AND FENCING STRAND, LIGHTNING CON-DUCTORS, STEAM PLOUGH ROPES (made from Webster and Horsfall's patent steel wire), HEMP, FLAX, ENGINE YARN, COTTON WASTE, TARPAULING, OIL SHEETS, BRATTICE CLOTHS, &c.

UNIVERSE WORKS, GARRISON STREET, BIRMINGHAM UNIVERSE WORKS, MILLWALL, POPLAR, LONDON. No. 2. OSWALD STREET, GLASGOW, CITY OFFICE No. 5, LEADENHALL STREET, LONDON, E.C.

THE NEWCASTLE CHRONICLE AND NORTHERN COUNTIES ADVERTISER. (ESTABLISHED 1764.)
Published every Saturday, price 2d., or quarterly 2s. 2d.
THE DAILY CHRONICLE AND NORTHERN COUNTIES ADVERTISER.
Published every morning. Price 1d.
Offices, 42, Grey-street, Newcastle-upon-Tyne; 50, Howard-street, North Shields; 195, High-street, Sunderland.

CHILDS' PATENT ATMOSPHERIC ORE STAMP AND QUARTZ CRUSHER.



THIS is an IMPROVED STAMP, and will give as many blows an effective blow of from 150 to 200 tons per minute, and will crush any known ore to an impalpable powder, saving every particle of the product for future operations,—a result not before obtained by any stamping process. Greater economy is combined than by any other known method. The patentee has erected a machine near his office, where he invites (by appointment) experienced and practical miners, engineers, chemists, metallurgists, and all others interested, to inspect its results. Every facility will be given for experiments upon different orea, and all other substances to be crushed.

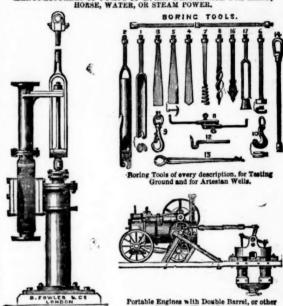
For particulars, address—

A. B. CHILDS,

No. 481, NEW OXFORD STREET, LONDON, W.C.

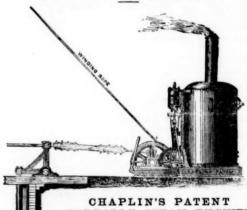
S. OWENS AND CO. (LATE CLINTON AND OWENS) WHITEFRIARS STREET, FLEET STREET, LONDON, E.C.,

HYDR_ULIC AND GENERAL ENGINEERS,
MANUFACTURERS OF PUMPS OF EVERY DESCRIPTION FOR HAND,
HORSE, WATER, OR STEAM POWER.



Full information, Drawings, Price Lists, &c., relating to the above, and to Hydraulic fachinery of all descriptions—Crabs, Pulleys, Blocks, and Hoisting Tackie of superior sanufacture—may be had on application.

Prize Medal-International Exhibition, 1863.



PORTABLE STEAM ENGINES,

FOR PUMPING AND WINDING.
SPECIALLY ADAPTED for PITS, QUARRIES, &c.
SIMPLE and STRONG: require NO FOUNDATION or CHIMNEY STALK, and are
EASILY ERECTED or REMOVED.
Sizes, from 2 to 30-horse power.

Sizes, from 2 to 30-horse power.

Stationary Engines, 1 to 30-horse power, with or without gearing.

Steam Cranes, 30 cwts. to 20 tons, for wharf or rail. Hoisting Engines, 2 to 30-horse power, with or without jib.

Contractors' Locomotives, 6 to 27-horse power. Traction Engines, 6 to 27-horse power. Ships' Engines, for winding, cooking, and distilling, passed by H.M. Government for half water. Steam Winches. Engines and Boilers for light screw and paddle steamers.

WIMSHURST & Co. Engineers 9, CORNWALL ROAD, LAMBETH, LONDON, S (Opposite Waterloo Railway Station).

This patent pump is the MOST EFFICIENT in existence for LIFTING ANY QUANTITY of WATER from ANY DEPTH. One lifting from a depth of 170 ft. may be seen at work daily, on application to the MESSRS. J. JACKSON AND CO., ENGINEERS, 17, GRACECHURCH STREET, LONDON, E.C.,

Who SUPPLY PUMPS and LICENCES.

Communications to Mr. Bastier, the patentee, to be sent to the same address.

AGENT FOR THE COUNTIES OF NORTHUMBERLAND AND DURHAW, YORKSHIRE,

DERBYSHIRE, AND NORTH STAFFORDSHIRE.
MM. THOMAS GREENER, MINING OFFICE, NORTHGATE,
DARLINGTON.

AGENTS FOR SCOTLAND.
MESSRS. P. and W. MACLELLAN, 127 and 129, TRONGATE, GLASGOW.

A C C I D E N T S W I L L H A P P E N t

Everyone should, therefore, provide against them!

£1000 in case of Death, or £6 per week while laid up by Injury, caused by
ACCIDENT OF ANY KIND (riding, driving, hunting, shooting, fishing, &c.),
may be secured by an Annusi Payment of from £3 to £6 5s. to the
RAILWAY PASSENGERS' ASSURANCE COMPANY,
The Oldest Established and Largest Company in the World insuring against
ACCIDENTS OF EVERY DESCRIPTION.
For particulars apply to the Clerks at any of the Ballway Stations, to the
Local Agents, or at the

3FFICES,—64, CORNHILL, and 10, REGENT STREET, LONDON.
WILLIAM J. VIAN, Sec.



Contract for British Iron, Class A CONTRACT DEPARTMENT, ADMIRALTY, SOMERSET HOUSE.

THE COMMISSIONERS for Executing the Office of Lord High Admiral of the United Kingdom of Great Britain and Ireland, do hereby give no o'clock, they will be READY to TREAT with such persons as may be willing to CONTRACT for SUPPLYING and DELIVERING into store at Her Majesty's several dockyards, all such quantities of

BRITISH IRON, CLASS A,

As may from time to time be ordered under a contract for twelve calendar months certain, and further until the expiration of three calendar months'

As may from time to time be ordered and a months extrain, and further until the expiration of three calendar months warning.

The average annual consumption for the last two years may be ascertained, and a form of the tender, including a schedule of the iron, and conditions of contract, may be obtained on application at this department.

No tender will be received after Two o'clock on the day of treaty, nor will any be noticed unless the party attends, or an agent for him duly authorised in writing. Every tender must be addressed to the Secretary of the Admiralty, and must also be delivered at the Department of the Storekeeper-General. Admiralty, Somerset House, accompanied by a letter signed by two responsible persons, engaging to become bound with the person tendering in the sum of £1000 for the due performance of the contract.

By order, ANTONIO BRADY,

Registrar of Contracts and Public Securities.

Contract Department, Admiralty, Somerset House, Sept. 23, 1867.

Sale of White Metal at Woolwich.

WAR OFFICE, PALL MALL, S.W.

OTICE IS HEREBY GIVEN, that the SECRETARY OF STATE FOR WAR is PREPARED to RECEIVE, on or before the 15th instant, Tenders must be made on the proper form, which may be obtained at this office, or on application to the Principal Superintendent of Stores, Royal Arsenal, Woolwich; to the Acting Military Store Officer, Birmingham; and the Barrack Master, Sheffield, who will exhibit samples of the metal.

The War Office, Pall Mall, S.W., Oct. 4, 1867.

Barrack Contracts for the Supply of Paillasse Straw in Great Britain.

WAR OFFICE, PALL MALL, LONDON, S.W.

WAR OFFICE, PALL MALL, LONDON, S.W.

NOTICE IS HEREBY GIVEN, that the SECRETARY OF STATE FOR WAR is PRESENTED TO BE AND THE SECRETARY OF STATE FOR WAR IS PRESENTED TO BE AND THE SECRETARY OF STATE OF THE SECRETARY OF STATE OF THE SECRETARY OF THE SECRETARY OF STATE OF THE SECRETARY OF STATE OF THE SECRETARY OF THE SECRET

Contract for British Iron

BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL. NOTICE IS HEREBY GIVEN that the DIRECTOR GENERAL OF STORES FOR INDIA will be READY on or before Monday, the sealed up, from such persons as may be willing to SUPPLY BROTT BROTTERS FOR INDIA WILLIAM SUPPLY BROTTERS FOR INDIA WILLIAM SUPPLY BROTTERS FOR INDIA WILLIAM SUPPLY BROTT BROTTERS FOR INDIA WILLIAM SUPPLY BROTTERS FOR

BEST BRITISH IRON. And that the conditions of the said contract may be had on application at the India Store Office. Cannon-row, Westminster, where the proposals are to be left any time before Two o'clock P.M. of the said 14th of October, 1867, after which hour no tender will be received.

India Office, Oct. 7, 1867.

Contract for Pig Iron.
BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL.

NOTICE IS HEREBY GIVEN that the DIRECTOR - GENERAL OF STORES FOR INDIA will be READY on or before Monday, the lath instant, to RECEIVE PROPOSALS, in writing, sealed up, from such persons as may be willing to SUPPLY—

FORTY TONS OF PIG IRON.

And that the conditions of the said contract may be had on application at the India Store Office, Caunon-row, Westminster, where the proposals are to be left any time before Two of clock P. And that the conditions of the said contract may be had on application at the India Store Office, Caunon-row, Westminster, where the proposals are to be left any time before Two of clock P. And the said contract may be had on application at the

nula score ouice, cannon-row, Westminster, where the proposals are to be lef-ny time before Two o'clock P.M. of the said 14th day of October, 1867, after thigh our no tender will be received. GERALD C. TALBOT, Director General / India Office, Oct. 7, 1867.

Contract for Coals and Coke.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL NOTICE IS HEREBY GIVEN that the DIRECTOR - GENERAL OF STORES FOR 1NDIA will be READY on or before Monday, the 14th instant, to RECEIVE PROPOSALS, in writing, sealed up, from such persons as may be willing to SUPPLY—

COALS AND COKE, TO BE DELIVERED IN CALCUTTA.

And that the conditions of the said contract may be had on application at the India Store Office, Cannon-row, Westminster, where the proposals are to be left any time before Two o'clock P.M. of the said 14th day of October, 1867, 4afrow which hour no tender will be received.

India Office, October 7, 1867. GERALD C. TALBOT. Director-General.

TO PURSERS, SECRETARIES, AND CAPTAINS OF MINING

A DVERTISEMENTS INSERTED, in the LONDON

A DVERTISEMENTS INSERTED, in the LONDON

And PROVINCIAL NEWSPAPERS, and the METROPOLITAN

MAGAZINES, by JOHN WOLPERT

JOHN WOLPERT, INFRAL ADVERTISING AGENT, 8, BIRCHIN LANE, CORNHILL, LONDON. GENERAL

FREE LABOUR REGISTRATION SOCIETY.

THE SELECT COMMITTEE of the above society (composed of working men) have drawn up a SET OF RULES for the Benefit Society, which have RECEIVED the SANCTION and APPROVAL of the HIGHEST AUTHORITIES in the Kingdom. They will be found to be more liberal than those of any existing Benefit Society or Trade Union. They leave perfect individual liberty of action to every member.

Among the many advantages offered may be named especially:—
1.—That one-third of all donations to the above society (already a considerable sum) is applied to strengthen the benefit fund.
2.—Thus enabling members to participate in all the privileges from the day of enrolment.

of enrolment.
3. No entrance fee.
4. —Cheapness of insurance, each of which is separate and optional.
For rules, registry sheets, and further particulars, apply at the head office
9, Victoria-chambers, Victoria-street, Westminster.
F. C. MAUDE, Colonel, Hon. Sec.

UTILISATION OF COAL DUST AND MANUFACTURE OF ARTIFICIAL FUEL. BARKER'S PATENTS

THE LONDON PATENT COAL COMPANY (LIMITED)
having purchased the sele rights to these patents throughout the United
Kingdom, are now granting licences to coal owners and others for the use of

Kingdom, are now granting licences to coal owners and others for the use of the invention.

The process is simple and inexpensive; the cost of manufacture, including the amalgamating material, being only 2s, per ton.

The fuel is without smell, and is available for all the uses of ordinary coal. It occupies 33 cubic feet of space per ton only, as against 42, the Admiralty measurement for coal. In the various tests it has undergone it has in every instance beaten similar round coal in evaporative power, weight for weight.

For particulars of these trials, and every information respecting the patent, apply to the Managing Director, or the Secretary, 26, Martin's-lane, Cannonstreet, London, E.C.

A NALYSES OF COAL, CANNEL, MINERAL OILS, and all OIL PRODUCING MINERALS are UNDERTAKEN by A. NORMAN TATE, F.A.S.L., &c.,

ANALYTICAL and CONSULTING CHEMIST, and CHEMICAL ENGINEER (Author of "Petroleum and its Products," &c.),

MOLD, NORTH WALES.

Plans and estimates for oil and chemical works prepared, and their erection superintended.

erection superintended.

Assays of metals and their ores carefully conducted

MESSES. FREDERIC GILL AND CO., STOCK AND SHAREDEALERS, ST. CLEMENT'S HOUSE, CLEMENT'S LANE LONDON, E.C., TRANSACT BUSINESS in all MINING STOCKS SHARES at closest market nett prices, either for cash or account.

MR. D. STICKLAND, M.E., having had upwards of 40 years mining experience in Cornwall, several years of which he has had the entire management of mines therein, enables him to GIVE GOOD ADVICE

Mining, Railway, and other Shares bought, sold, or exchanged. Shares for sale in mines and quarries that will pay 15 to 20 per cent. per annum.

Offices, 5, Finsbury-street, London, E.C.

THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Share		1	Pai	d. 1	Last !	Pr.	Busine	58.	Total	ı ai	vs. 1	Per	sh	are. Las	paid.
1500	Alderley Edge, c, Cheshire*			0					. 8	17	8.,	. 0	5	0. July	1867
200	Botallack. t. c, St. Just	91	- 5	0					488	15	0	. 5	0	0 May	1866
4000	Brookwood, I	1	11	0.,	_				. 0	5	0	. 0	- 2	6Sept	. 1866
1000	Bronfloyd, I, Cardigan*	12	0		-		1616		. 8		0			0Aug	
6400	Cashwell, I, Cumberland	2	10	0	_		-				6			6Aug	
	Cargoll, s-l, Newlyn	15	5	7	12		11 12				0			0 Feb.	
	Creegbrawse and Penkevil, t		_		-						0			0. Oct.	1867
	Cwm Erfin, !, Cardiganshire*		10	0	-						0			O. Oct.	1867
	Cwmystwith, I, Cardiganshire	60			-				379					0Apri	
	Derwent Mines, s-l, Durham	300	0	0	-				T		0			0. June	
	Devon Gt. Consols, c, Taylstock			0	430		420 430		1074		0			0. Sept	
	Ding Dong, t, Gulvalt			6	-		18 20				0			0. Sept	
	Dolcoath, c, t, Camborne	128			-		10 20							O. Aug.	
	East Caradon, c, St. Cleert			6	54		6 634	**			6			0. July	
	East Darren, I, Cardiganshire	32		0	-		0 034								
	East Pool, t, c, Pool, Illogan	24		0	_			• •	146					0July	
	East Wheal Lovell, t, Wendron.	3		0	83	,	9 91/	••	412					0. Sept.	
	Foxdale, l, Isle of Man*	25		0	-07		8 81/4		- 3		6			8. Aug.	
				6				**	71					0. Sept.	
5000	Frank Mills, I, Christow	4			10		77/ 101/		8		6			0 Feb.	
15000	Great Laxey, l, Isle of Man* Great Wheal Vor. t, c, Helston†	40		0	19		17% 18%		.7					0Sept.	
				0	181	-	17 18		12		6			6. Sept.	
	Herodsfoot, I, near Liskeardt			0	36		35 37		42					0June	
	Hingston Down, c, Calstock			6	-				400	10	0	0		0Apri	
	Lisburne, l, Cardiganshire			0	_				492	10	0	3		0May	
3000	Maes-y-Safn, l, Flint*	20		0	-		0.014		2		0			0Sept.	
	Marke Valley, c, Caradon	4		6	61/	200	6 61/4		4		0			0Oct.	1867
3000	Minera Boundary, l, Wrexham*	1		0							0			0 Mar.	
1800	Minera Mining Co.1, Wrexham*	25			200				218	18				0Aug.	
20000	Mining Co. of Ireland, c, l, cl	7		0	1734					-				7Jan.	
40000	Mwyndy Iron Orest	3		0	_				0	6	6	0	2	6 Mar.	1866
200	Parys Mines, c, Anglesey*	50		0	-				157					0Jan.	1866
12800	Prince of Wales t, Calstock			6	2		2% 2%		0	2	6	0	2	6 Aug.	1867
6000	Prosper United, t, c, St. Hilary			0	21/4				0		0			0Feb.	1867
1120	Providence, t, Uny Lelant	10		7	30%		814 2914		83	7	6	0		0Aug.	1867
	South Caradon, c, St. Cleert	1	5		410		400 410		562	10	0	6	0	0July	1867
	South Darren, l, Cardigan*	3		6	-				0	7	1	0	1	6. July	1867
	So. Wh. Frances, c, Itlog. !!			9	40		36 38		371		6		0	0Sept.	1867
	Summer Hill, l, Moldl			6	-				1		0		5	0Oct.	1867
6000	Tincroft, c, t, Pool, Illogant	9		0	14		12 13				0		5	0Aug.	1867
2000	Trumpet Cons., t, Helston	11		0	12		10 12		11	12	6	0	7	6 Aug.	1867
3000	W. Chiverton, I, Perranzabuloet	10	0	0	65		64 65		21	7	6	2	0	0Aug.	1867
	W. Wheal Seton, c, Cambornet	47	10	0	155		145 155		476	10	0	3		0 Aug.	1867
512	Wheal Basset, c, Illogant	5	2	6	85		80 85		627	0	0	2	0	0Oct.	1867
1024	Wheal Friendship, c, Tavistock	20	0	0	Heapper				300					0 Nov.	1866
4295	Wheal Kitty, t, St. Agnes	5	4	6	-				3		0			0 Feb.	1867
	Wheal Mary Ann, I, Menheniott	8		0	17%	1	61/6 171/6		62					0. Sept.	1867
	Wheal Rose, c, Scorrier				denne				1					0 Feb.	1866
	Wheal Seton, t, c, Camborne	58	10	0	1071/		105 110		246	15	0	2	10	0 Aug.	
	Wheal Trelawny, s-l, Liskeardt		17	0	-									0. June	
3000	Whitewell Lead, Clitheroe	0		0	-									0July	
17000	Wicklow, c, i, Wicklow	2	10		191/4		1934		46	15	0	1	0	0. April	1867

FOREIGN DIVIDEND MINES

ı						-	 and the same
l		Alamillos, I, Spain*1		0 0		% 134	 0 1 0 0 1 0 Sept. 1867
l		Australian,c, South Australia †		7 6			 0 1 0 0 1 0 Aug. 1867
ŀ		Cape Copper Mining*†		0 0		614 7	 2 12 6 0 10 0 April 1866
١	76000	Don Pedro North del Rey **	0 1	4 0	234	3 31/8	 0 79 0 3 6 Aug. 1867
l	25000	Fortuna, I, Spain*†	2	0 0			 1 7 4 0 2 0 Sept. 1867
ı	20000	Gen.MiningAssoc., NovaScotiat		0 0		15 17	 23 10 0 0 15 0 June 1867
١	10000	Gonnesa, 1,* [5000 £5 pd., 5000 #	64 pd.]			 10 per cent July 1867
		Linares, t, Spain*†	3 (0 0			 11 8 4 0 5 0 Sept. 1867
١	50000	Panulcillo, e, Chili *	3 (0 0		2 3	 10 per cent Yearly.
	6000	Peel River Land and Mineral*†	-				
	30000	Pestarena, g, Italy*†	2 1	0 0	278	2% 2%	
	10000	Pontgibaud, s-l, Francet					 4 14 3 0 11 0 June 1867
	100000	Port Phillip, g, Clunest	1 0	0	1%	11/8 13/8	 0 17 6 0 1 0 Aug. 1867
	120000	Scottish Australian Min. Co. t.	1 0	0		1 136	 716 per cent Mar. 1867
		St. John del Rey, Brazil*†			591/2		 77 5 0 4 10 0 June 1867
	50000	Victoria (London) [25000 £1 pd.	, 25000	0 128.	6d. pd.	1	 0 9 0 0 1 0 Jan. 1866
,	40000	West Canada Mining Co	1 (0			 0 19 6 0 2 6 May 1866

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	P	aid.	L	ast Pr	. Bu	s. do	ne. Last	Call.
100000	Anglo-Brazilian, g*t	0	10 (5		16 56	Nov.	1866
	Anglo-Italian, g*t	0	5	0	. 8			May	1867
40000	Brittany Silver-Lead Mines, France* [15750 18s. pd.]		-						
2464	Burra Burra, c, South Australia;	8	0 (_				
25000	Capula, s, Mexico*†	1	12 (-			Aug.	1866
30000	Chontales, g, s, Nicaragua*†	4	0 (53%	45	6 436	June	
12000	Cobre Copper Company, c, Cubat:		10 (-			May	
10000	Copiapo Mining Company, Chilit		10 (
10000	Copiapo Smelting, Chili		0 (April	1866
	Copper Miners' Co. of South Australia * [150 £100 pd.,				1.)			Nov.	1866
15000	El Chico Silver Mining and Reduction Company*	5	0 (coquain			Nov.	1866
	English and Canadian Mining Company*	5			-			Fully	pd.
	Fortune Copper Mining Co. of Western Australia	2			-			Fully	pd.
	Frontino and Bolivia, g, New Granada*†				158.	3	6 34	June	1867
	Great Barrier Land, Mining, &c., New Zealand	5	0 0		-			Fully	
	Great Northern, c, South Australia	1	11 6		_			Sept.	1862
	Kapunda Mining Co., Australiatt	1	0 0		****				
	Lusitanian (Portugal) †	3	0 0		-				
83090	Mariquita, g, Brazil	0	12 6		-			Jan.	
12500	Nerbudda Coal and Iron* [6000 £5 pd., 6500 £4 pd.]		-					Aug.	1865
	New Quebrada, c, Venezuela*†	3	10 0		11/4				
	Nova Scotia Land and Gold*	1	15 0		minim			Sept.	
	Otea, c, New Zealand*	2	0 0		-			Fully	pd.
	Rhenish Consolidated, [6000 £5 pd., 4178 £2 10s. pd.]		-		-			May	
100000]	Rossa Grande, g, Brazil*†		10 0		_	%	s 5/8	June	
	San Pedro del Monte, s, Mexico*	4	0 0		_			Sept.	
	San Roque, I, Spain	5	0 0		-			Fully	
1000000	Taquaril, g, Brazil*	0	2 6		*****		-11	Sept.	1867
6000	Terreseu, s-l, Isle of Sardinia	2	0 0		-		21/8		
		28	5 0		214	13	6 216		- 1
10000	Vancouver, cl*ft	6	0 0		_				
#000 Y	Val Sassam, s, c, l, Italy +	7	0 0		-			Aug.	
45000 Y	Victor Emanuel, c, Italy	1	0 0		-			Fully	pd.
30000 A	Washoe, g, Nevadat	5	0 0			• •		Fully	
80000 V	Worthing, c, South Australia +	1	0 0		-			Fully	
75000 7	Yorke Peninsula, South Australia	1	0 0					Fully	
45000 3	Yudanamutana, c, South Australia * :	3	0 0		1 .		14 1	Fully	pd.

PROGRESSIVE HOME MINES.

	Share	s. Mines.	Paid.	Last !	Pr.Bus. do	ne, Last	Call.	1
f	5000	Bryn Gwiog, I, Flint	0 18 0			June		1
	914	Caradon Consols c, St. Cleer	32 13 6		10 12			1
T,		Carn Brea, c, t, Illogant	28 0 0		10 12			1
n		Carnaryonshire, I, Carnaryon*	4 0 0			Fully		i
-		Chiverton, I, Perranzabuloe	9 7 6			May	1847	1
1-	3000	Chiverton Moor, I, Perranzabuloe	6 8 6		5% 5%	Ang	1967	1
	9880	Clifford Amalgamated, c, Gwennapt	33 17 6		7% 7%	- June	1967	1
	2048	Colquite & Callington United	0 5 0	202	**	Sept.	1007	ı
-		Condurrow, c, t, Cambornet	76 10 0			**	1061	
		Cook's Kitchen, c, Illogan;			91/4 10	Inly	1900	1
У		Craddock Moor, c, St. Cleert	12 12 0		45	Sept.		1
•		Dale, I, North Stafford	1 0 0			Fully		ı
		Drake Walls, t, Calstockt	2 5 0	144.	128. 148	Dec	1866	ı
١.		East Basset, c, Redruth†1		171/4				ı
,		East Carn Brea, c, Redruth!	3 15 0	95%	2% 2%	o uij	1001	١.
		East Grenville, c, Camborne			. 2 214	Aug.	1807	יו
	4000	East Wheal Russell, c, Tavistock†	12 5 6		1% 1%	. Inly	1007	١.
		Gonamena, c, St. Cleer			*** */8	Aug.		P
10	5000	Great North Downs, c, Redruth	6 13 0			Feb.		1
	4800	Great Retallack, s-l, b, Perranzabuloe			334 4	July		1
	6000	Great South Chiverton, s-1, Perranzabuloe				A.g.		ı
		Great South Tolgus, c, Redruth	1 4 0		56 34	June		1
)	1500	Great Wheal Fortune t, Breage			** /8 /*	July		
đ	1024	Nangiles, t, c, Kea				Oot.		
1	400	New Wheal Seton, c, Camborne	58 10 O		35 40	Ang.		1
	2457	North Downs, c, Redruth	5 3 10	5/6	56 36	. Sept.		
g	695	North Roskear, c, Camborne	53 14 0		/4	Sept.		
	5936	North Treskerby, c, St. Agues	1 9 0		328, 348	Dec.	1860	
		North Wheal Crofty, c, Illogant		4				
	3000	North Wheal Chiverton, I, Perranzabuloe		454	3% 4%	Mar.	1867	
0	5000	Old Westminster, Denbigh*		. 4	3% 4%	June	1867	
	8465	Pedn-an-drea, t, Redruth		56		May	1867	
,	1024	Rose and Chiverton United, I, Newlyn	5 0 0	654	6 614	Nov.	1867	
-		South Condurrow, t, c, Camborne	3 18 6	. 5/A	· · 1/4 5/4	Oct.	1867	
	940	St. Ives Consols, t, St. Ivest	10 15 0	7	·· 1/4 5/4	.Nov.		
1	920	Stray Park, c, t, Cambornet	43 6 8			July	1867	
1	6000	Tamar Valley, Tavistock, s-l	0 5 0	11s.	9s. 11s.	Nov.	1866	
		Trelyon Consols, t, St. Ives	16 0 0	4	31/4 4	Dec.	1866	
1		West Basset, c, Illogant:	1 15 0		34 1	Mar.	1867	
8		West Caradon, St. Cleer, ct	17 0 0		78	July	1866	
		West Drake Walls, Calstock, c	0 2 6			Mar.	1867	1
		West Great Work, Breage, t	5 11 0	316	3 314	June	1866	
		West St. Ives, St. Ives, t, c	0 1 0	5%	1/4 5/4	Oct.	1865	
		West Wheal Kitty, t, St. Agnes	2 17 6		3/8 3/4	May	1867	
	6000	Wheal Agar, c, Illogan	7 8 6	15/8	1% 1%	July	1867	П
1		Wheal Buller, c, Redruth !	21 10 0	25	28 24	Mar.		
1		Wheal Crebor, c, Tavistock	2 4 0	88.		Aug.		
3	849	Wheal Emily Henrietta, c, Illogan	18 5 0		56	July	1867	1
u	6000	Wheal Grenville, c, Cambornet	10 5 0	1%	29s. 30s.	Sept.	1867	П
	4096	Wheal Uny, t, c, Redruth	10 14 6		**	.Oct. 1	1867	
		b blands of seels a service						

PROGRESSIVE MINES.

	PROGRESSIVE MINES.
-	Shares. Mines. Paid. Last Pr. B. 4000 Ballacorkish, I. of Man, I. cs. 3 0 0.
	1031 Bedol Aur, I, Holywell 1 12 0
d. 67	1248 Boscaswell, t, c, St. Just 7 6 0
66	
67 66	1000 Budnick Consols, c, t 4 0 0
66	30000 Caldbeck Fells, l, Cumberld. 1 10 0
67 67	1000 Camborne Consols. c 18 10 0
67 67	11000 Cape Cornwall, t, c* [8000 £2 10s. pd., 3000 10s. p 6000 Carn Camborne, c, Cambrn. 2 3 0
67 67	
37	600 Cardiganshire, l* 17 10 0. — 20000 Carysfort [3200 £2½ pd., 16800 £1½ pd.] 2500 Central Minera, l* 3 17 6. — 16000 Central Snailbeach l* 1 0 0. — 4000 Clara, L Llywarnog 9 16 — 16000 Central Snailbeach l* 1 0 0. — 16000 Central S
87 87	16000 Central Snailbeach l* 1 0 0
87 87	1000 Central Shallocach* 1 0 0
37	1024 Copper Hill, c, Redruth: 12 10 0
36	12000 Crelake, c, Tavistock 3 12 0 6000 Cuddra, t, St. Austell 5 5 0
17	4000 Devon Wheal Frances, c 1 6 5
16	25000 Dundalk, Ireland, I* 0 15 0
7	1000 East Basset and Grylls, t 3 5 0 — 6000 E. Bottle Hill, t. Plympton 0 9 6. —
17 16	4000 East Chiverton, I, Perranz 2 14 3 "
7	
6	6000 East Neptune, c, Marazion —
6	3986 E. Providence, t, Uny Lelant 5 4 9 5000 E. Rosewarne, c, t, Gwinear 2 17 0
7	5610 East Staefell, I, I. of Man* 2 0 0
7	200 East Toigus, c, Redruth 96 0 0
7	1190 E. Wh. Agar, c, St. Cleer 12 17 0
7	1 6000 Fortesche Consols, C 0 12 6
7	940 Fowey Con., c, Tywardreath! 5 4 6
7	
7	1 40000 Glasgow Caradon c* [30000 £1 nd 10000 to
7	6000 Gothic, s-1, Cardigan* 2 10 0
6	10000 Great Cwmsymlog, s-l* 1 15 0
7	3000 Great Chiverton, s-l* 9 10 0
7	3000 Gt. East Lovell, t. Helston 9 1 0
7	19500 Gt No Lawretteland Manie 0 15 a "
	1000 Great North Tolgus, c 10 0 0
7	3313 Great Wheal Baddern, t 7 17 6
6	10240 Gunnislake (Clitters'), t, c 4 19 0
7	6400 Harwood L Durham*
7	6000 Lady Bertha, c. Tavistock. 4 4 0
7	1019 Leeds and St. Aubyn, t, c 19 13 4
	6000 Maudita a Lastwithtel
7	640 Mount Pleasant, l. Mold 4 0 0
7	19900 Nother Housthafding dr - 3 stock - 1
7	6000 New Birch Tor & Vitifer, t2. 1 13 6 6000 New Clifford, c., Gwennap*. 2 10 0 24000 New Cornish [12000 £1 pd. 12000 15 pd. 12000
6	24000 New Cornish [12000 £1 pd., 12000 15s. pd.] 6400 N. Crow Hill, l. St. Stephen. 3 4 0
	6514 New E. Russell, c. Tavistock 0 12 6
	5750 New Treleign, c, Redrith 4 80
1.	boo New Trevenen, t, Wendron. 8 14 0 514
7	16000 North Devon, s-1 0 17 0
6	8000 North Jane, t, s-l, Kenwyn 3 1 6
7	20000 North Hinera, I, Wrexham* 1 0 0. — 20000 North Minera, I, Wrexham* 1 0 0. — 4000 No. Phœnix, c, Linkinhorne 4 11 0. — 2023 North Pool, c, Illogan 5 16 0. — 1024 No. Retallack c Percentagolica 2 0
6	3933 North Pool, c. Illogan 5 16 0
6	1024 No.Retallack,c,Perrazabuloe 2 0 0 — 1935 No. Shepherds, I, Newlyn* 6 10 0 —
	6000 North Wheal Basset, c, tt 5 0 0
7	6144 N. Wh. Robert, Smp. Spiney 4 8 11. — 12288 Okel Tor, c, Calstock 2 7 4. —
2	6400 Par Consols c St Blazavit 9 19 0
	sood Pendeen Consols, c, St. Just 6 70
5	sood Fennans, t, St. Agnes a vo
- 1	1772 Polberro, t, St. Agnes 18 0 0 — 512 Polbreen, t, St. Agnes 8 0 0 —
5	12000 Redmoor, c, t, Callington 1 13 6 — 6000 Reinnie Laxey, l, I. of Man*. 4 0 0 —
1	2000 Reinine Laxey, l, 1. of Man. 4 0 0
1	KOLE Posemall Hall & D
1	3915 Bosewall Hill & Ransom, c., 3 0 0 — 3818 Rosewarne United, c, f. 4 3 0 — 16000 Shropshire Copper, c* 2 10 0 — 20500 Snacfell, t, Isle of Man* 1 0 0 — 400 Sliver Brook, s-t, Carmar.*. 10 0 0 — 12000 Sortridge Cons., c, Tavistki, 1 14 6 — 512 South Basset, c, Gwennap., 27 0 0 — 2000 So. Chiverton, s. I. Perrans. 5 15 0 —
1	20500 Snaefell, <i>l</i> , Isle of Man* 1 0 0 — 400 Silver Brook, <i>s-l</i> , Carmar.* . 10 0 0 —
	400 Silver Brook, s-l, Carmar.* 10 0 0 — 12000 Sortridge Cons., c, Tavistk.† 1 14 6 —
	512 South Basset, c, Gwennap 27 0 0 — 3000 So. Chiverton, s, l, Perranz. 5 15 0 —
	6000 S. Dolcoath & Carnarth Con 9 16 6 -
1	tond So Transactors t VIII
1	937 So. Wh. Crofty, c, Illogan 24 10 10. 1614
1	6000 South Wheal Grenville, t, c 1 0 6 — 400 So. Wh. Seton, c, Camborne 81 3 0 —
1	512 South Tolgus, c, Redruth 9 10 0
1	242 Spearne Moor, t. St. Just 6 20
1	9000 St. Just Cons. t [6000 £1 pd., 3000 10s. pd.]
1	300 Steeple Aston Iron Ore Co 4 0 0 4% 49 7000 Stiperstones, I, Salop* 5 0 0
1	501 Tresavean and Trethurrup 16 11 0
1	4440 Trevenen & Tremenheere 7 11 0 — 4096 Treweatha, s-i, Menheniot 7 17 0 —
ı	1943 Treworlis, t, Wendron 11 15 4 6400 Tyne Head, Northumb. t, c* 0 18 0
ı	4200 Vigra and Clogau, c, Doig. \$1., 5 0 0
1	4440 Trevenen & Tremenheere 7 11 0 4096 Treweatha, s.l. Menheniot 7 17 0 1943 Treworlis, t. Wendron 11 15 4 4000 Tyne Head, Northumb, t.e. 0 18 0 4200 Vigra and Clogau, c, Dolg.**, 5 0 0 1819 West Cwm Erfin, t.* (319 £4 paid) 4200 West Damsel, c, Gwennap 38 10 0 4200 West Damsel, c, Gwennap 38 10 0 440. 4400 W. Maria & Fortes, c, Lam 3 10 0 440. 4400 W. Maria & Fortes, c, Lam 3 10 0 12800 West Prince of Wales, c 0 10 0 12800 West Prince of Wales, c 0 10 0 1000 West Rose Down, c, Linking, 19 15 0
1	5000 West Godolphin, t, c 41/4 4
ı	6000 Westminster, Flint, i* 5 0 0 12800 West Prince of Wales, c 0 10 0
1	12800 West Prince of Wales, c 0 10 0 — 1000 West Rose Down, c, Linking. 19 15 0 —
1	512 West Tolgus, c, Redruth 54 10 0
1	512 W. Wh. Frances, t, Illogan. 105 15 0 — 1000 Wheal Basset and Grylis, t, 7 18 6 —
1	1000 Wheal Basset and Grylis, t 7 18 6 – 4000 Wh. Emma, c, Buckfastleigh 3 19 0 –
-	6000 Wheal Ida, s-l, St. Ive 1 3 0 1024 Wh. Kitty, t, Uny Lelantt 3 10 6
1	512 Wheal Jane, s-l, Kea 10 10 0 —
1	728 Wheal Margery, St. Ives, t, c 26 14 0 —
1	1000 Wheal Basset and Gryins, L. † 10 0
	80 Wheal Owles, t, St. Just 2 70 0 0 6000 Wheal Sparnon, c, Redruth 3 6 0
-	1920 Wh. Trannack, c, Sithney 1 13 3
1	1200 Wheat Trevenna, t, c* 10 0 0
4	

MISCELLANEOUS.

 $b, \ \text{blende} \ ; \ cl., \ \text{coal} \ ; \ c., \ \text{copper}; \ g., \ \text{gold} \ ; \ t., \ \text{lead} \ ; \ s., \ \text{milver}; \ sl., \ \text{slate} \ ; \ s-l, \ \text{sliver-lead} \ ; \ t. \ \text{tin} \ ; \ s., \ \text{xinc.}$

. Companies marked thus * have been incorporated with Limited Liability; those marked † have been admitted on the Stock Exchange, those thus ‡ have paid Dividends.

London: Printed by Richard Middleton, and published by Henry English (the proprietors), at their office, 26, Fleet Street, E.C., where all munications are requested to be addressed.—October 12, 1867.